Self Diagnosis Supported model

SERVICE MANUAL

AE-5 CHASSIS

MODEL	COMMANDER	DEST	CHASSIS NO.	MODEL	COMMANDER	DEST	CHASSIS NO.
KV-29FX65B	*RM-887*	*FRENCH*	*SCC-Q13H-A*	***KV-29FX65K***	*RM-887*	*OIRT*	*SCC-Q16L-A*
KV-29FX65E	*RM-887*	*ESP*	*SCC-Q14H-A*				

FD Trinitron

TRINITRON ® COLOR TV

SONY®

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CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP.

WARNING !!

AN ISOLATION TRANSFORMER MUST BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD DUE TO LIVE CHASSIS, THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE'LANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENTION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÈ LORS DE TOUT DÈPANNAGE LE CHÁSSIS DE CE RÈCEPTEUR EST DIRECTMENT RACCORDÈ Á L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS Á LA SECURITÈ!!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES SCHÈMAS DE PRINCIPE, LES VUES EXPLOSÈES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÈCURITÈ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPSANTS SONY DONT LE NUMÈRO DE PIÈCE EST INDIQUÈ DANS LE PRÈSENT MANUEL OU DANS DES SUPPLÈMENTS PUBLIÈS PAR SONY.

ITEM MODEL	Television System	Stereo System	Channel Coverage	Color System
French	B/G/H, L,I	GERMAN/NICAM Stereo	VHF : E02-E12, R01-R12 UHF : E21-E69, R21-R69 CABLE TV : S01-S20, B-Q HYPER : S21-S41	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Spanish	B/G/H	GERMAN /NICAM Stereo	VHF : E02-E12, R01-R12 UHF : E21-E69, R21-R69 CABLE TV : S01-S05, S1-S20 HYPER : S21-S41	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
OIRT	B/G/H, D/K	GERMAN /NICAM Stereo	VHF : E02-E12, R01-R12 UHF : E21-E69, R21-R69 CABLE TV : S01-S20 HYPER : S21-S41	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)

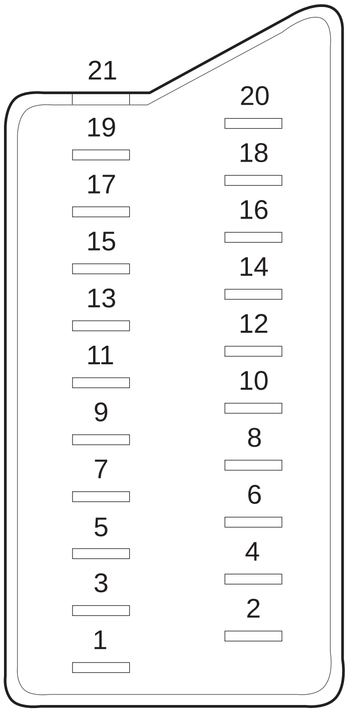
Model	KV-29FX65B	KV-29FX65E	KV-29FX65K
Power Consumption	121W	121W	121W

Picture Tube	FD Trinitron Wide Approx 72 cm (29 inches) (Approx 68 cm picture measured diagonally) 104 degree deflection	Sound output Subwoofer	Right and Left speaker 2x20W (Music Power) 2x10W (RMS) 1x30W (Music Power) 1x15W (RMS)
Input/Output Terminals [REAR]		Power Requirements	220 - 240V
1: 21-pin Euro connector (CENELEC standard)	Inputs for Audio and Video signals. Inputs for RGB. Outputs of TV Video and Audio signals.	Dimensions	Approx 771x585x506mm
2: 21-pin Euro connector	Inputs for Audio and Video signals. Inputs for S Video. Outputs of TV Video and Audio signals. (selectable)	Weight	Approx 56kg
3: 21-pin Euro connector	Inputs for Audio and Video signals. Inputs for S Video. Outputs for Video and Audio signals (monitor out)	Supplied Accessories	RM-887 Remote Commander (1) IEC designated R6 battery (2)
Phono Jacks	Output Connectors variable for Audio Signals	Other Features	Nextview, Noise Reduction,2000 Page Text Memory, Graphic Equaliser
Input/Output Terminals [FRONT]		**Remote control system**	Infrared control
Headphone jack	stereo mini jack	Power requirements	3V dc 2 batteries IEC designation R6 (size AA)
Audio inputs	phono jacks	Dimensions	Approx 210x45x23mm (w/h/d)
Video inputs	phono jacks	Weight	Approx 95g (not including battery)
S Video input	4 pin DIN		

Design and specifications are subject to change without notice.

Model Name Item	KV-29FX65B	KV-29FX65E	KV-29FX65K
Pal Comb	OFF	OFF	OFF
PIP	OFF	OFF	OFF
RGB Priority	ON	ON	ON
Woofer Box	ON	ON	ON
Scart 1	ON	ON	ON
Scart 2	ON	ON	ON
Scart 3	ON	ON	ON
Front in (4)	ON	ON	ON
Projector	OFF	OFF	OFF
AKB in 16:9 mode	ON	ON	ON
Norm B/G	ON	ON	ON
Norm I	OFF	OFF	OFF
Norm D/K	ON	ON	ON
Norm AUS	OFF	OFF	OFF
Norm L	OFF	OFF	OFF
Norm SAT	OFF	OFF	OFF
Norm M	OFF	OFF	OFF
Teletext	ON	ON	ON
Nicam Stereo	ON	ON	ON

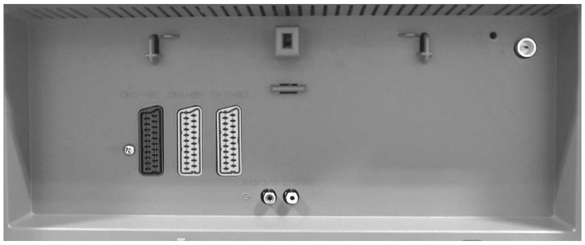
21 pin connector



Pin No	1	2	3	Signal	Signal level
1	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedence : Less than 1kohm*
2	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedence : More than 10kohm*
3	○	○	○	Audio output A (left)	Standard level : 0.5V rms Output impedence : Less than 1kohm*
4	○	○	○	Ground (audio)	
5	○	○	○	Ground (blue)	
6	○	○	○	Audio input A (left)	Standard level : 0.5V rms Output impedence : More than 10kohm*
7	○	●	●	Blue input	0.7 +/- 3dB, 75 ohms positive
8	○	○	○	Function select (AV control)	High state (9.5-12V) : Part mode Low state (0-2V) : TV mode Input impedence : More than 10K ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (green)	
10	○	○	○	Open	
11	○	●	●	Green	Green signal : 0.7 +/- 3dB, 75 ohms, positive
12	○	○	○	Open	
13	○	○	○	Ground (red)	
14	○	○	○	Ground (blanking)	
15	○	–	–	Red input	0.7 +/- 3dB, 75 ohms, positive
	–	○	○	(S signal Chroma input)	0.3 +/- 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1-3V) Low state (0-0.4V) Input impedence : 75 ohms
17	○	○	○	Ground (video output)	
18	○	○	○	Ground (video input)	
19	○	○	○	Video output	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
20	○	–	–	Video input	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
	–	○	○	Video input Y (S signal)	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
21	○	○	○	Common ground (plug, shield)	

○ Connected ● Not Connected (open) * at 20Hz - 20kHz

Rear Connection Panel



Front Connection Panel

S-Video socket

S Video socket pin configuration		
Pin No	Signal	Signal Level
1	Ground	-
2	Ground	-
3	Y (S signal) input	1V+/- 3dB 75ohm, positive Sync. 0.3V -3 +10dB
4	C (S signal) input	0.3V+/- 3dB 75ohm, positive Sync.

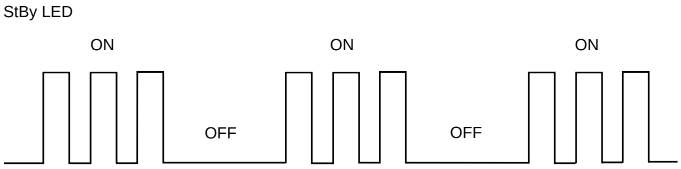
AE-5 SELF DIAGNOSTIC SOFTWARE

The identification of errors within the AE-5 chassis is triggered in one of two ways :- 1: Busy or 2: Device failure to respond to IIC. In the event of one of these situations arising the software will first try to release the bus if busy (Failure to do so will report with a continuous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the LED (Series of flashes which must be counted) See table 1., non fatal errors are reported using this method.

Diagnostic Item Description	No of times Standby LED Flashes	Probable cause Location	Detected Symptoms
Power does not turn on	Does not light	Power cord is not plugged in. Fuse is open circuit.	Power does not come on No power is supplied to the TV AC power supply is faulty
+B Overcurrent (OCP)	2 times	H.OUT (Q6803/6804) is shorted. (D Board) Linearity FET (Q6806) is shorted. (D Board) IC6604 Power IC is shorted. (D Board)	Power does not come on Load on power line has shorted
Vertical Deflection stopped	4 times	+15V is not supplied R6835 open (D Board) -15V is not supplied R6834 open (D Board) IC6700 is shorted (D Board)	Vertical deflection pulse has stopped Power line has shorted

Error Message	LED Flashes
No error	00
Reserved	01
OCP (Over Current Protection)	02
OVP (Over Voltage Protection)	03
Vertical Protection	04
Unstable AKB (check starts after 30's, enable TT61 disable TT62)	05
Horizontal Protection	06
Speaker Protection	07
I2C bus 0 error	08
M-B Tele-Text-Decoder	09
M-B ST24C32, NVM	10
J-B TDA9320, Main Colour Decoder	11
B1/B2-B Feature Box	12
B1-B D/A-Converter	13
E-B Backend	14
J-B MSP3410D, Sound Processor	15
J-B CXD2057, Auto Wide	16
External RAM	17

Flash Timing Example : e.g. error number 3



Error Detection Monitor

Device acknowledge is used to check IIC errors. Device acknowledge is checked by sending an IIC start sequence during CRT power on. Each device is checked three times, if there is no acknowledge after each attempt, it will be regarded as an error.
There are three steps to check for errors.

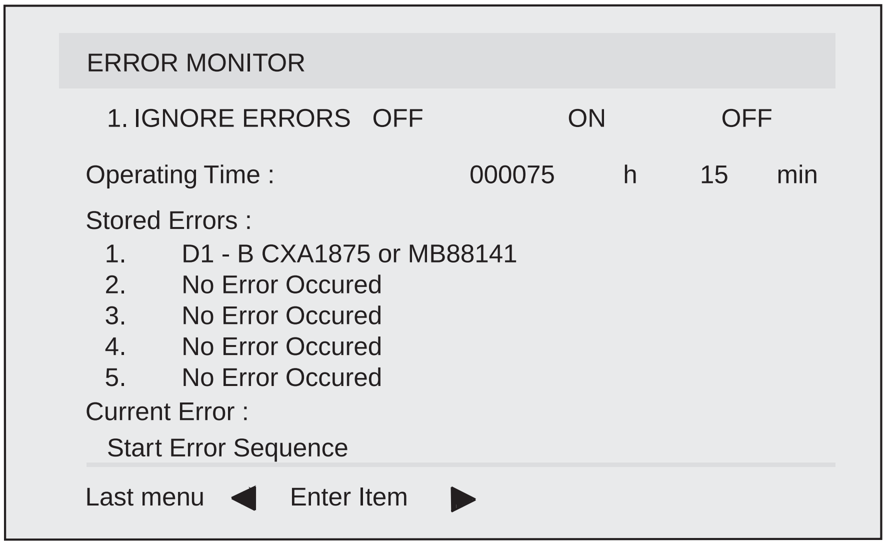
1. IIC line 0
   If all devices except the NVM have errors, IIC line 0 error is displayed.
2. Board check
   If all devices mounted on one board have errors, board error is displayed.
3. Each device check
   If IIC line error and board error are not detected then the device with the error is displayed.

The detected errors can be displayed as follows :

1. Error Monitor Menu.
2. Error Reader.

1. Error Monitor Menu

Error Display Mode is entered by the following sequence of commands   Standby -> Information -> Digit 5 -> Volume Down -> TV



```
ERROR MONITOR
  1. IGNORE ERRORS   OFF          ON         OFF
Operating Time :              000075     h     15     min
Stored Errors :
  1.      D1 - B CXA1875 or MB88141
  2.      No Error Occured
  3.      No Error Occured
  4.      No Error Occured
  5.      No Error Occured
Current Error :
  Start Error Sequence
Last menu ◀    Enter Item  ▶
```

2. Error Reader Display

The error reader display is connected to the service connector to read actual error codes. The part number for the error reader display is S-188-900-10. Once an error has been detected it will then be displayed on the two digit error reader. The errors displayed refer to the following table.

Error Code	Error Message
000h	No error occurred
001h	Bus error, IIC0
002h	Bus error, IIC1
100h	**A-Board**
101h	A-B CXA1875, Port Expander
102h	A-B TU1326, Main Tuner
103h	A-B TU1350, Sub Tuner
200h	**B1-Board**
201h	B1-B P83C654, Feature Box B1-B. SDA9280, *D/A Convertor*
202h	B1-B *P83C654, Feature Box B1-B. SDA9280*, D/A Convertor
300h	**B2-Board**
301h	B2-B. SAA4977, BESIC
302h	B2-B. SAA495X, Field Memory
400h	**B3-Board**
401h	B3-B. MID-X
402h	B3-B. Panorama
403h	B3-B. DRC
404h	BK-B. Picture Booster
500h	**D1-Board**
501h	D1-B CXA8070, Dynamic Convertor
502h	D1-B CXA1875, Port Expander
600h	**E-Board**
601h	E-B CXD2100, Backend
700h	**J-Board**
701h	J-B CXD2057, Auto Wide
702h	J-B SDA9288, PIP
703h	J-B Sub Colour Decoder
704h	J-B Main Colour Decoder
705h	J-B CXA1875, Sub-Sound
706h	J-B TDA7309, HP-Amplifier
707h	J-B TEA6422DT, Audio Switch
708h	J-B MSP3410D, Sound Processor
709h	J-B TC9337F, Sound DSP
70Ah	J-B CXA21X69, AV Switch
800h	**M-Board**
801h	M-B ST24C32, NVM

The operating instructions mentioned here are partial abstracts from the ‘Operating Instruction Manual’. The page numbers of the ‘Operating Instruction Manual’ remain as in the manual.

Installation

6. Tuning your TV

Before you tune your TV, you will be asked to set your language and country.

1. The Language/Country menu appears on the TV screen with the word ‘English’ highlighted.

2. Press the ▲ or ▼ buttons on the remote control to select your chosen language then press the OK button to confirm.

3. Press ▲ or ▼ to select the country in which you wish to operate the TV then press the OK button to confirm your choice. Select ‘OFF’ if you do not want your channels stored in a given channel sequence starting from programme position 1.

4. The ‘autotune’ menu appears on the TV screen in your selected language. Press the OK button to confirm.

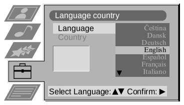
5. Ensure the aerial is connected as instructed, then press the OK button to confirm. The TV starts to automatically search and store all available channels for you. This may take a few minutes - please be patient and do not press any buttons.

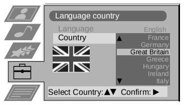
6. Once the TV has tuned all available channels the ‘Programme Sorting’ menu appears on the TV screen enabling you to change the order of the channels on your TV. If you wish to change the channel order, press the ▲ or ▼ buttons to select the channel you want to move, then press ▶. Press the ▲ or ▼ buttons to select the new programme number position for your selected channel then press the OK button to confirm. The selected channel now moves to its new programme position and the other channels move accordingly. Repeat this procedure if you wish to sort the order of other channels on your TV.

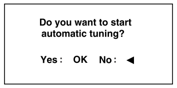
7. Press the MENU button to remove the menu from the TV screen.

8. Press the PROGR+/- or the numbered buttons to view the TV channels.

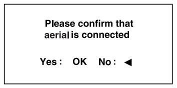
Note: If you would like to stop the autotune process at any stage, press the OK button.


Language country
Language
Country
Čeština
Dansk
Deutsch
English
Español
Français
Italiano
Select Language: ▲▼ Confirm: ▶

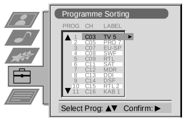

Language country
Language
English
Country
France
Germany
Great Britain
Greece
Hungary
Ireland
Italy
Select Country: ▲▼ Confirm: ▶


Do you want to start automatic tuning?

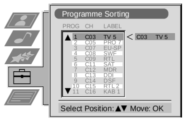
Yes : OK No : ◀


Please confirm that aerial is connected

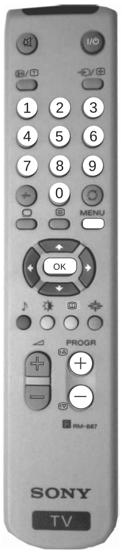
Yes : OK No : ◀


Programme Sorting
Select Prog: ▲▼ Confirm: ▶

PROG	CH	LABEL
1	C03	TV 5
2	C05	PRO 7
3	C07	EU-SP
4	C08	SWF
5	C09	RTL
6	C11	SAT
7	C12	MDR
8	C13	DDI
9	C14	DSF
10	C15	RTL 2
11	C16	KAB 1


Programme Sorting
C03 TV 5
Select Position: ▲▼ Move: OK

PROG	CH	LABEL
1	C03	TV 5
2	C05	PRO 7
3	C07	EU-SP
4	C08	SWF
5	C09	RTL
6	C11	SAT
7	C12	MDR
8	C13	DDI
9	C14	DSF
10	C15	RTL 2
11	C16	KAB 1


MENU
OK
PROGR
SONY
TV
RM-887

7. Finding your video channel

If you have connected a VCR to your TV, you now need to find your video channel.

1. Press the PROGR+/- buttons on the TV remote control until your video picture appears on the TV screen.

Note: If you wish to move your video channel to a different programme position, refer to the ‘Re-arranging the TV channels’ section of this instruction manual.

Operation

NexTView*

* depending on availability of service

ⓘ NexTView is an electronic programme guide with up to 1 week* of programme information on those channels included in the selected provider.
*If the data exceeds the memory of NexTView, you will get information on less than 7 days.

When looking for information you can search by theme (sports, art etc.), date or time (e.g. broadcasts between 8 and 9 p.m.). When you’ve found a programme you can go directly to this programme, use the timer to remind you of it or preset your VCR with Smartlink.

ⓘ The NexTView provider is responsible for the contents of the guide. The TV set is responsible for the presentation, that is the menu structure and the navigation, if there is none from the provider. If there is a navigation from the provider the basic operation with the joystick is the same as described in the Sony navigation.

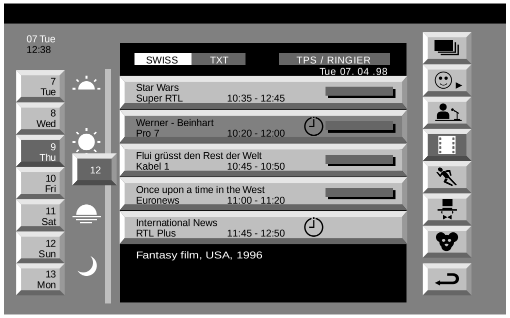
At first you need to select a channel providing a NexTView service. In this case the indication “NexTView” is displayed as soon as all data is available. When you later change the channel you can still select this NexTView service.

Operation using the Sony navigation

1. Press ⊞ to switch NexTView on and off.
2. Use the joystick buttons as follows
   - moving up or downwards within a column: Use ▲ or ▼.
   - going to the left columns time and date: Use ◀.
   - going to the right column icons: Use ▶.
   - Confirming a selection: Press OK.
   (a) while in the columns date, time or icon (themes), the programme list changes according to the selection.
   (b) while in the programme list, confirming a running broadcast brings you directly to the TV programme or confirming a future programme brings you to the long info menu.

Index

▤	full list of selection
☺	personal selection
👤	news broadcasts
🎞	movies
🏃	sports
🎩	entertainment
🐻	children
↩	return to last menu


07 Tue
12:38
7 Tue
8 Wed
9 Thu
10 Fri
11 Sat
12 Sun
13 Mon
12
SWISS
TXT
TPS / RINGIER
Tue 07. 04 .98
Star Wars
Super RTL
10:35 - 12:45
Werner - Beinhart
Pro 7
10:20 - 12:00
Flui grüsst den Rest der Welt
Kabel 1
10:45 - 10:50
Once upon a time in the West
Euronews
11:00 - 11:20
International News
RTL Plus
11:45 - 12:50
Fantasy film, USA, 1996

NexTView*

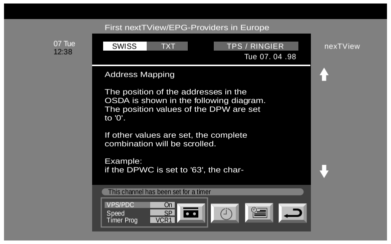
Individual Setting

When you select there will be no personal pre-selection. ☺▸ lets you make your own individual selection of themes, limiting the search to the marked ones.

1. Select☺▸ using ▲ or ▼. Push ▶ to enter.
   The menu Individual Settings is displayed.
2. Select the item you wish to mark using ▲ or ▼. Confirm by pressing OK.
   Repeat step 2 for all the items you wish to have in your list.
3. When finished with the list, select ↩ using ▶ and press OK.

Using the ‘Long Info’ menu

1. Select a future programme in the column programme list using ▲ or ▼. Press OK.
   The long info menu is displayed.



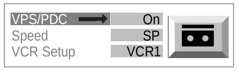
Address Mapping

The position of the addresses in the OSDA is shown in the following diagram. The position values of the DPW are set to '0'.

If other values are set, the complete combination will be scrolled.

Example:
if the DPWC is set to '63', the char-

You may wish to record the selected programme with your VCR.
(only with Smartlink VCRs)



2. Select using ◀ and press OK.
   This information is transferred to the VCR connected to your set.

Setting up ypur VCR
3. Select VPS/PDC by pushing ◀ repeatedly.

With this setting on, you have the guaranteed recording of the whole broadcast should there be a change in the TV programme. This only works if the selected channel broadcasts a VPS/PDC signal.

- Select On or Off using OK.

4. Select Speed using ▼.

Select between standardplay (SP) or longplay (LP) mode.With longplay you can record twice as much on a videotape. The picture quality, however, may suffer.
- Select SP or LP using OK.

5. Select VCR Setup using ▼.

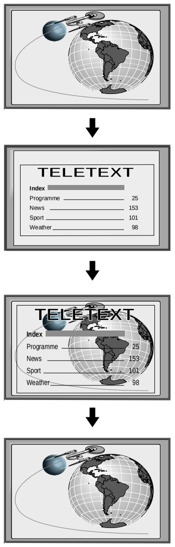
Select which of the connected Smartlink VCRs you wish to programme.
- Select VCR 1 or 2 using OK.

6. Select ↩ using ▶. Press OK.
   You are back in the last menu.

Teletext

Most TV channels broadcast information via Teletext. The index page of the teletext service (usually page 100) gives you information on how to use the service. Please use a TV channel with a strong signal, otherwise there may be Teletext errors.

Switching Teletext on and off



1. Select the TV channel which carries the teletext service you want to view.
2. Press the button once to get Teletext only.
3. Press twice for Mix mode.
4. Press a third time to switch off Teletext.

Selecting a Teletext page

Input three digits for the page number using the numbered buttons on the remote control. If you make a mistake, type in any three digits then re-enter the correct page number.

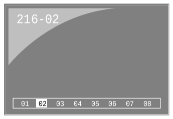
Using Other Teletext Functions

Selecting the next or preceding page
Press the or buttons on the remote control to select the previous or next page.

Selecting a sub page
A teletext page may consist of several sub pages. In this case an information line is displayed, showing the number of subpages. Select the sub page by pressing ▲ or ▼.

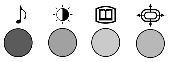
To freeze a Teletext page
Press the button to freeze the page. Press again to cancel the freeze.

Revealing concealed information
Press the button to reveal information. Press again to conceal the information.



Using colour buttons to access pages (Fastext)
(only available if the TV station broadcasts Fastext signals)
When the colour coded menu appears at the bottom of a page, press a coloured button on the remote control (green, red, yellow or blue) to access the corresponding page.

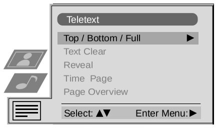
Using the feature ‘Page Catching’
1. Press the numbered buttons on the remote control to select a teletext page which has several page numbers on it (eg the index page).
2. Press the OK button.
3. Press ▲ or ▼ to select the desired page number then press the OK button. The requested page is displayed after some seconds.



Teletext

Using the Teletext menu

1. With Teletext switched on, press the MENU button on the remote control to display the menu on the TV screen.
2. Press ▲ or ▼ to select your chosen item on the screen then press ▶ to display the relevant sub menu.
3. To remove the Teletext menu from the screen, press the MENU button.



Top/Bottom/Full

The Top/Bottom/Full sub menu allows you to enlarge different sections of the Teletext page. Press ▲ to enlarge the upper half of the screen, Press ▼ to enlarge the lower half. Press the OK button to restore the page to normal size. Press ◀ to return to the Teletext menu screen.

Top: ▲ Bottom: ▼ Full: OK

Text Clear

Text Clear is a function that displays a TV channel while a Teletext page is being searched for.

1. Press the ▤ button on the remote control to select full screen text.
2. Press the MENU button to display the 'Teletext' menu.
3. Press ▲ or ▼ to highlight 'Text Clear' and press ▶ to select.
4. The current TV channel is displayed. Once the text page has been found a blue ▤ symbol will appear in the top left hand corner of the screen.
5. Press the ▤ button on the remote control to view the page.

Reveal

Some Teletext pages contain hidden information (eg for a quiz), which can be revealed.

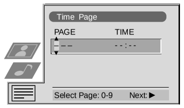
1. In text mode press the MENU button on the remote control to access the 'Teletext' menu.
2. Press ▲ or ▼ to highlight 'Reveal' and press ▶ to select. The hidden information is displayed on the screen.

Time Page*

*depending on availability of service.

Time Page allows a time-coded Teletext page (such as an alarm page), to be displayed at a set time.

1. In Text mode press the MENU button on the remote control to access the 'Teletext' menu.
2. Press ▲ or ▼ to highlight 'Time Page' and press ▶ to select. The 'Time Page' sub menu is displayed.
3. Enter the desired page number using the numbered buttons on the remote control.
4. Enter the desired time using the remote control.
5. Press OK to confirm the settings. The TV will exit Teletext mode and the time will be displayed in the top left hand corner of the screen. At the requested time the desired page is displayed.



Page Overview*

*only available if TOP-Text is transmitted by the TV station.

In this menu the TOP-Text pages are divided into two columns, the first column showing 'blocks' of pages and the second showing 'groups' of pages.

1. Press ◀ or ▶ to select the first or second column.
2. Press ▲ or ▼ to select the relevant 'group' or 'block' of pages.
3. Press the OK button to display the chosen pages.

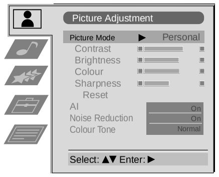
Using the TV menu system

The TV consists of a menu system which is based on a series of user friendly on-screen displays and menus. These displays will help you get the most from your TV, helping you to change picture and sound settings, to alter the size of the TV picture and to rearrange the TV channels etc.

Adjusting the picture and sound

The picture and sound are preset at the factory. You can however adjust them to suit your own taste.

1. Press the MENU button on the remote control to display the menu on the TV screen.
2. Press the ▲ or ▼ buttons to select 👤 for picture settings or ♪ for sound settings then press ▶ to enter either the 'Picture Adjustment' menu or the 'Audio Adjustment' menu.
3. Press the ▲ or ▼ buttons to select the item on the screen you wish to adjust then press ▶ to confirm. For a description of the menu items and their effects, see the table below.
4. Press the ▲, ▼, ▶ or ◀ buttons to adjust your selected item.
5. As soon as you have adjusted the item, press the OK button to store the new setting.
6. Repeat steps 3-5 if you wish to adjust any of the other items.
7. Press the MENU button to remove the menu from the TV screen.

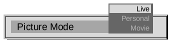


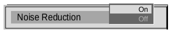
Picture Control

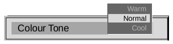
Item		Effect/Operation
Picture Mode	▼ ▲	Live (for live broadcasts) Personal (for individual settings) Movie (for movie broadcasts)
Contrast		Less ◀ ▶ More
Brightness*		Darker ◀ ▶ Brighter
Colour*		Less ◀ ▶ More
Hue**		Reddish ◀ ▶ Greenish
Sharpness*		Softer ◀ ▶ Sharper

*Only available if 'Personal' is selected in 'Picture Mode'
**Only available for NTSC colour signal (eg. US video tapes)

Item		Effect/Operation
Reset		Resets picture to the factory preset levels
AI (Artificial Intelligence)	▼ ▲	On: Automatic optimization of contrast level according to the TV signal. Off: Normal.
Noise Reduction	▼ ▲	On: Reduces picture noise in case of a weak broadcasting signal. Off: No noise reduction.
Colour Tone	▼ ▲	Warm: Gives a warm tint to the picture. Normal: Normal. Cool: Gives a cool tint to the picture.

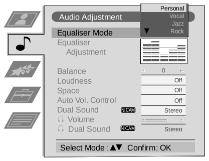


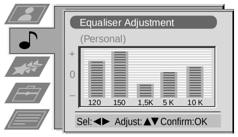




Sound Control

Item	Effect/Operation
Equaliser Mode	▼ Personal Vocal Jazz Rock Pop ▲ Flat (fixed setting, cannot be adjusted)
Equaliser adjustment	You can adjust the mode selected in Equaliser mode by cutting and boosting the 5 selected frequency bands. Press ◀ or ▶ to select the frequency band then ▼ or ▲ to adjust the frequency. Finally, press the OK button to store the new adjustment.


Audio Adjustment
Personal
Vocal
Jazz
Rock
Equaliser Mode
Equaliser
Adjustment
Balance
0
Loudness
Off
Space
Off
Auto Vol. Control
Off
Dual Sound
NICAM
Stereo
Volume
Dual Sound
NICAM
Stereo
Select Mode : ▲▼ Confirm: OK


Equaliser Adjustment
(Personal)
+
0
–
120
150
1.5K
5 K
10 K
Sel: ◀▶ Adjust: ▲▼ Confirm:OK

ℹ If you want to store the new setting, you need to set the Equaliser mode to ‘Personal’. Personal mode permanently stores the setting, all other modes (Vocal, Jazz, Rock, Pop) store only until the next mode change.

Item	Effect/Operation
Balance	◀ More left ▶ More right
Loudness	▼ Off: Normal ▲ On: For music broadcasts
Space	▼ Off: Normal ▲ On: Special acoustic effect
Auto Vol. Control	▲ Off: Volume level changes according to the broadcast signal. ▼ On: Volume level of the channels will stay the same independent of the broadcast signal (eg in the case of advertisements).
Dual Sound	For a bilingual broadcast: ▼ A for channel 1 ▲ B for channel 2 For a stereo broadcast: ▼ Mono ▲ Stereo

Loudness
Off
On

Space
Off
On

Auto Vol. Control
Off
On

Dual Sound
NICAM
Mono
Stereo

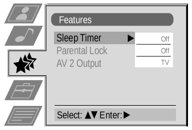
ℹ When NICAM stereo is being broadcast, the indication NICAM appears briefly on the screen.

Item	Effect/Operation
Headphones 🎧 Volume	Adjusts headphone volume. Can also adjust the volume level of additional equipment connected to the RCA sockets on the rear of the TV.
🎧 Dual Sound	For a bilingual broadcast: ▼ A for channel 1 ▲ B for channel 2

Dual Sound
NICAM
B
A

Using the Features menu

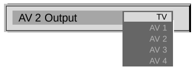
1. Press the MENU button on the remote control to display the menu on the TV screen.
2. Press the ▲ or ▼ buttons to select ✯ for the ‘Features’ menu then press ▶ to enter the ‘Features’ menu.
3. Press the ▲ or ▼ buttons to select the desired menu item then press ▶ to confirm. For a description of the menu items and their effects, see the table below.
4. Press the ▲, ▼, ▶ or ◀ buttons to select the desired setting.
5. Press the OK button to confirm your choice of setting.
6. Repeat steps 3-5 if you wish to select any of the other items.
7. Press the MENU button to remove the menu from the TV screen.


Features
Sleep Timer ▶
Off
Parental Lock
Off
AV 2 Output
TV
Select: ▲▼ Enter: ▶

Item	Effect/Operation
Sleep Timer	You can select a time after which the TV switches itself into standby mode. ▼ Off ▲ 90 min
Parental Lock	▼ Off: No parental lock. ▲ On: This feature disables the TV buttons when the set is in standby mode. It is only possible to switch the set back on by pressing a button on the remote control.
AV2 Output	▼ TV audio/video signal from the aerial ╖ AV1 audio/video signal from scart 1 AV2 audio/video signal from scart 2 AV3 audio/video signal from scart 3 ▲ AV4 audio/video signal from connectors on front of the TV

Sleep Timer
10 min

Parental Lock
Off
On

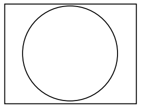

AV 2 Output
TV
AV 1
AV 2
AV 3
AV 4

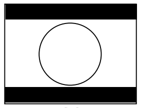
Changing the screen size

This feature allows you to change the size of the TV picture.

Press the ⌖ button on the remote control repeatedly or use the ▲ or ▼ buttons to select one of the following formats then press the OK button to confirm your selection:

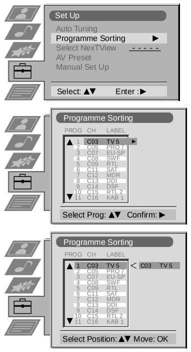
4:3	conventional 4:3 picture size, full picture information.
16:9	for 16:9 broadcasts.


4:3


16:9

Re-arranging the TV channels

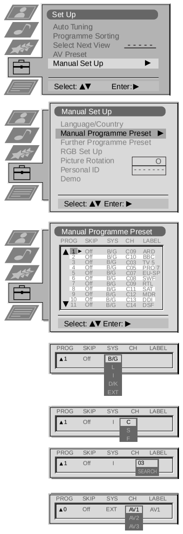
After tuning the TV, you can use this feature to change the order of the channels on the TV.


Set Up
Auto Tuning
Programme Sorting
Select NextView
AV Preset
Manual Set Up
Select: ▲▼ Enter: ▶
Programme Sorting
PROG CH LABEL
Select Prog: ▲▼ Confirm: ▶
Programme Sorting
PROG CH LABEL
Select Position: ▲▼ Move: OK

1. Press the MENU button on the remote control to display the menu on the TV screen.
2. Press the ▼ button to select the 🧰 symbol on the menu screen then press ▶ to enter the ‘Set Up’ menu.
3. Press the ▼ button to select ‘Programme Sorting’ then press ▶ to enter the ‘Programme Sorting’ menu.
4. Press the ▲ or ▼ buttons to select the channel you want to move then press ▶ to confirm.
5. Press the ▲ or ▼ buttons to select the new programme position (eg PROG 4) for your selected channel then press the OK button to confirm. The selected channel now moves to its new programme position and the other channels move accordingly.
6. Repeat steps 4 and 5 if you wish to sort the other channels.
7. Press the MENU button to remove the menu from the TV screen.

Manually tuning the TV

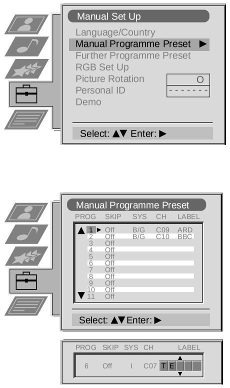
You have already tuned the TV automatically using the instructions at the start of this manual. You can however carry out this operation manually, adding channels to the TV, one at a time.


Set Up
Auto Tuning
Programme Sorting
Select Next View
AV Preset
Manual Set Up
Select: ▲▼ Enter: ▶
Manual Set Up
Language/Country
Manual Programme Preset
Further Programme Preset
RGB Set Up
Picture Rotation
Personal ID
Demo
Select: ▲▼ Enter: ▶
Manual Programme Preset
PROG SKIP SYS CH LABEL
Select: ▲▼ Enter: ▶
PROG SKIP SYS CH LABEL

1. Press the MENU button on the remote control to display the menu on the TV screen.
2. Press the ▼ button to select the 🧰 symbol on the menu screen then press ▶ to enter the ‘Set Up’ menu.
3. Press the ▼ button to select ‘Manual Set Up’ on the menu screen then press ▶ to enter the ‘Manual Set Up’ menu.
4. Press the ▼ button to select ‘Manual Programme Preset’ on the menu screen then press ▶ to enter the ‘Manual Programme Preset’ menu.
5. Press the ▲ or ▼ buttons to select a programme number for your channel (eg PROGR 1 for BBC1) then press ▶ to highlight the ‘SKIP’ column.
6. Press ▲ to select ‘OFF’ then press ▶ to highlight the ‘SYS’ column.
7. Press the ▲ or ▼ buttons to select the TV broadcast system or ‘EXT’ for a video input source (AV1, AV2, ...) then press ▶ to confirm.
8. Press the ▲ or ▼ buttons to select ‘C’ for terrestrial channels, ‘S’ for cable channels, or ‘F’ for direct frequency inputs then press ▶ to confirm.
9. Select the first number digit of ‘CH’ (channel) then the second number digit of ‘CH’ with the number buttons on the remote control or
   Press the ▼ button to search for the next available channel.
10. If you do not wish to store this channel on the programme number you selected, press the ▲ or ▼ buttons to continue searching for the desired channel.
11. If this is the channel you wish to store, press the OK button.
12. Repeat steps 5-11 if you wish to store more channels then press the MENU button to remove the menu from the TV screen.

Naming a channel

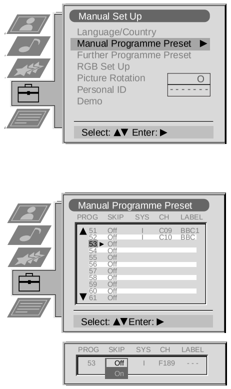
Names for channels are usually taken automatically from Teletext if available. You can however name a channel or an input video source using up to five characters (letters or numbers).


Manual Set Up
Language/Country
Manual Programme Preset
Further Programme Preset
RGB Set Up
Picture Rotation
Personal ID
Demo
Select: ▲▼ Enter: ▶
Manual Programme Preset
PROG SKIP SYS CH LABEL
Select: ▲▼Enter: ▶
PROG SKIP SYS CH LABEL

1. Press the MENU button on the remote control to display the menu on the TV screen.
2. Press the ▼ button to select the 🧰 symbol on the menu screen then press ▶ to enter the ‘Set Up’ menu.
3. Press the ▼ button to select ‘Manual Set Up’ then press ▶ to enter the ‘Manual Set Up’ menu.
4. Press the ▼ button to select ‘Manual Programme Preset’ then press ▶ to enter the ‘Manual Programme Preset’ menu.
5. Press the ▲ or ▼ buttons to select the channel you wish to name.
6. Press the ▶ button repeatedly until the first element of the ‘LABEL’ column is highlighted.
7. Press the ▲ or ▼ buttons to select a letter or number (select ‘-’ for a blank) then press ▶ to confirm. Select the other four characters in the same way.
8. After selecting all the characters, press the OK button.
9. Repeat steps 5 to 8 if you wish to label other channels.
10. Press the MENU button to remove the menu from the TV screen.

Skipping programme positions

This function enables you to skip unused programme positions when selecting them with the PROGR+/- buttons. However, by using the number buttons you can still select the skipped programme position.


Manual Set Up
Language/Country
Manual Programme Preset
Further Programme Preset
RGB Set Up
Picture Rotation
Personal ID
Demo
Select: ▲▼ Enter: ▶
Manual Programme Preset
PROG SKIP SYS CH LABEL
Select: ▲▼Enter: ▶
PROG SKIP SYS CH LABEL
Off
On

1. Press the MENU button on the remote control to display the menu on the TV screen.
2. Press the ▼ button to select the 🧰 symbol on the menu screen then press ▶ to enter the ‘Set Up’ menu.
3. Press the ▼ button to select ‘Manual Set Up’ then press ▶ to enter the ‘Manual Set Up’ menu.
4. Press the ▼ button to select ‘Manual Programme Preset’ then press ▶ to enter the ‘Manual Programme Preset’ menu.
5. Press the ▲ or ▼ buttons to select the programme position then press ▶ to highlight the ‘SKIP’ column.
6. Press the ▲ or ▼ buttons to select ‘Off’ or ‘On’ (if you wish to skip this programme position) then press the OK button to store.
7. Repeat steps 5 and 6 if you wish to skip or unskip further programme positions.
8. Press the MENU button to remove the menu from the TV screen.

Using the Further Programme Preset feature

With this feature you can a) adjust the attenuation of each channel, b) individually adjust the volume level of each channel, c) manually fine-tune the TV to obtain a better picture reception if the picture is distorted or d) preset the AV output for the programme positions of channels with scrambled signals (eg from a pay TV decoder). In this way a connected VCR records the unscrambled signal.

1. Press the MENU button on the remote control to display the menu on the TV screen.

2. Press the ▼ button to select the 🧰 symbol on the menu screen then press ▶ to enter the 'Set Up' menu

3. Press the ▼ button to select 'Manual Set Up' then press ▶ to enter the 'Manual Set Up' menu.

4. Press the ▼ button to select 'Further Programme Preset' then press ▶ to enter the 'Further Programme Preset' menu.

5. Press the ▲ or ▼ buttons to select the relevant programme number then press the ▶ button repeatedly to select a) ATT b) VOL c) AFT or d) DECODER. The selected item changes colour.

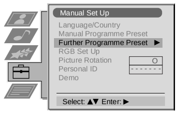
6. a)**ATT - RF Attenuator**
   Press the ▲ or ▼ buttons to switch attenuator 'on' or 'off'. Press the OK button to confirm the selection. Repeat steps 5 and 6a if you wish to adjust the attenuation of the other channels.

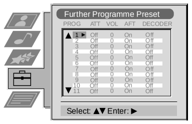
   b)**VOL - Volume Offset**
   Press the ▲ or ▼ buttons to adjust the volume level (range -7 to +7) of the channel. Store by pressing the OK button. Repeat steps 5 and 6b if you wish to adjust the volume level of the other channels.

   c) **AFT - Automatic Fine Tuning**
   Press the ▲ or ▼ buttons to fine tune the channel frequency over a range of -15 to +15. Press the OK button to confirm. Repeat steps 5 and 6c if you wish to fine tune other channels.

   d)**DECODER**
   Press the ▲ or ▼ buttons to select AV1 or AV2 for the programme position then press the OK button to confirm. You can now attach a decoder to the AV1 or the AV2 socket on the back of the TV and the picture from that decoder will appear on this programme number. Repeat steps 5 and 6d to preset the AV output for other programme positions.

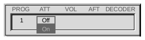
7. Press the MENU button to remove the menu from the TV screen.

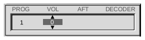

Manual Set Up
Language/Country
Manual Programme Preset
Further Programme Preset ▶
RGB Set Up
Picture Rotation
Personal ID
Demo
Select: ▲▼ Enter: ▶

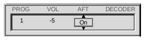

Further Programme Preset

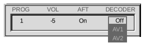
PROG	ATT	VOL	AFT	DECODER
1 ▶	Off	0	On	Off
2	Off	0	On	Off
3	Off	0	On	Off
4	Off	0	On	Off
5	Off	0	On	Off
6	Off	0	On	Off
7	Off	0	On	Off
8	Off	0	On	Off
9	Off	0	On	Off
10	Off	0	On	Off
11	Off	0	On	Off

Select: ▲▼ Enter: ▶


PROG ATT VOL AFT DECODER
1
Off
On


PROG VOL AFT DECODER
1
0


PROG VOL AFT DECODER
1
-5
On


PROG VOL AFT DECODER
1
-5
On
Off
AV1
AV2

Selecting the 'Demo' feature

This function provides an overview of some of the features available on the TV.

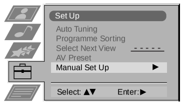
1. Press the MENU button on the remote control to display the menu on the TV screen.

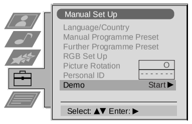
2. Press the ▼ button to select the 🧰 symbol on the menu screen then press ▶ to enter the 'Set Up' menu

3. Press the ▼ button to select 'Manual Set Up' then press ▶ to enter the 'Manual Set Up' menu.

4. Press the ▼ button to select 'Demo' then press ▶ to start the demonstration (which lasts for approximately 5 minutes).

5. Press the ▢ button to remove the demonstration from the TV screen.


Set Up
Auto Tuning
Programme Sorting
Select Next View
AV Preset
Manual Set Up ▶
Select: ▲▼ Enter: ▶


Manual Set Up
Language/Country
Manual Programme Preset
Further Programme Preset
RGB Set Up
Picture Rotation
Personal ID
Demo Start ▶
Select: ▲▼ Enter: ▶

Adjusting the picture rotation

Because of the earth's magnetism the picture might slant. In this case you can readjust the picture.

1. Press the MENU button on the remote control to display the menu on the TV screen.

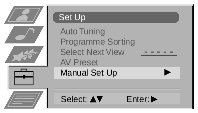
2. Press the ▼ button to select the 🧰 symbol on the menu screen then press ▶ to enter the 'Set Up' menu

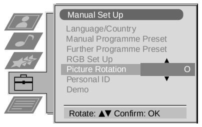
3. Press the ▼ button to select 'Manual Set Up' then press ▶ to enter the 'Manual Set Up' menu.

4. Press the ▼ button to select 'Picture Rotation' then press ▶ to enter the 'Picture Rotation' sub menu.

5. Press the ▲ or ▼ buttons to rotate the picture over a range of -5 to +5 then press the OK button to store.

6. Press the MENU button to remove the menu from the TV screen.


Set Up
Auto Tuning
Programme Sorting
Select Next View
AV Preset
Manual Set Up ▶
Select: ▲▼ Enter: ▶


Manual Set Up
Language/Country
Manual Programme Preset
Further Programme Preset
RGB Set Up
Picture Rotation 0
Personal ID
Demo
Rotate: ▲▼ Confirm: OK

Adjusting the picture geometry for an RGB source

When connecting an RGB source such as a Sony Playstation you may need to readjust the geometry of the picture.

1. Press the ⊕ button on the remote control to select the connected RGB source ⊕1.

2. Press the MENU button to display the menu on the TV screen.

3. Press the ▼ button to select the 🧰 symbol on the menu screen then press ▶ to enter the 'Set Up' menu

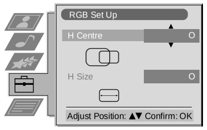
4. Press the ▼ button to select 'Manual Set Up' on the menu screen then press ▶ to enter the 'Manual Set Up' menu

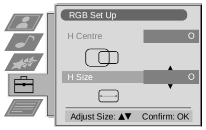
5. Press the ▼ button to select 'RGB Set Up' on the menu screen then press ▶ to enter the 'RGB Set Up' sub menu.

6. Press ▶ to select H Centre then press ▲ or ▼ to adjust the centre of the picture over a range of -10 to +10. Store the new range by pressing the OK button.

7. Press ▶ to select H Size then press ▲ or ▼ to adjust the horizontal coordinates over a range of -10 to +10. Store the new range by pressing the OK button.

8. Press the MENU button to remove the menu from the TV screen.


RGB Set Up
H Centre 0
H Size 0
Adjust Position: ▲▼ Confirm: OK


RGB Set Up
H Centre 0
H Size 0
Adjust Size: ▲▼ Confirm: OK

Specifications

TV system
B/G/H, D/K

Colour system
PAL, SECAM
NTSC 3.58, 4.43 (only Video In)

Channel coverage
See the 'Channel Display Table' below.

Picture tube
FD Trinitron, Approx. 72cm (29 inches)

Rear Terminals

⇥1 / ⇤1	21-pin Euro connector (CENELEC standard) including audio/ video input, RGB input, TV audio/video output.
⇥2 / ⇤2	21-pin Euro connector (CENELEC standard) including audio/ video input, S-video input, Selectable audio/video output.
⇥3 / ⇤3	21-pin Euro connector (CENELEC standard) including audio/ video input, S-video input, Monitor audio/video output.
⇤ L/G/S/I R/D/D/D	RCA connectors, variable output for audio signals.
╥	RF In

Front Terminals

⇥4	Video input -phono jacks
⇥4	Audio inputs - phono jacks
⇥4	S video input - 4 pin DIN
🎧	Headphones jack - minijack stereo

Sound output
Left/Right: 2x20W (Music Power)
2x10W (RMS)
Sub woofer: 30W (Music Power)
15W (RMS)

Power consumption
121W

Dimensions (wxhxd)
Approx. 771x585x506mm

Weight
Approx. 51kg

Accessories supplied
RM-887 remote control (1)
IEC designated size AA batteries (2)

Optional accessory
TV Stand: SU-29FX2

Other features
Flat display Trinitron tube, noise reduction, graphic equaliser, 2000 page TEXT memory, personal ID, sleep timer, NexTView.

Design and specifications are subject to change without notice.

Channel Display Table

	Receivable Channels	Channel Displays
B/G/H	E2..12, 21..69	C02..C12, C21..69
KABEL-TV (1)	S1..S41	S01..S41
KABEL-TV (2)	S01..S05	S42..S46
	M1..M10	S01..S10
	U1..U10	S11.S20
ITALIEN	A, B..H, H1, H2	C13, C14..C20, C11, C12
D/K	R01..R12, R21..R69	C01..C12, C21..C69
	S01..S05	S42..S46

Troubleshooting

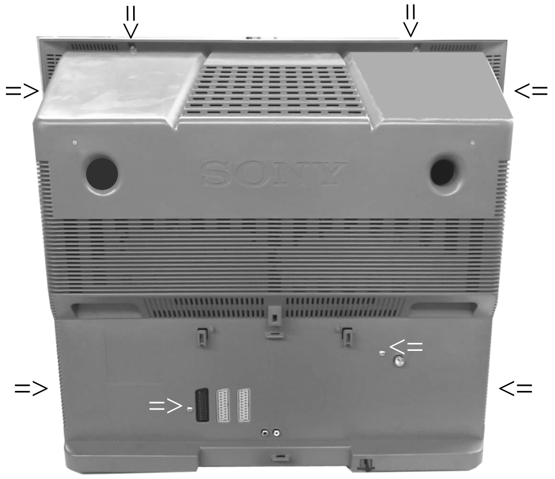
Here are some simple solutions to problems which may affect the picture and sound.

Problem	Suggested remedy
No picture (screen is dark), no sound	• Plug the TV in. • Press the ⓘ button on the front of the TV. • If the ⏻ indicator is on press the I/⏻ button or a numbered button on the remote control. • Check the aerial connection. • Turn the TV off for 3 or 4 seconds and then turn it on again using the ⓘ button on the front of the TV.
Poor or no picture (screen is dark), but good sound.	• Using the MENU system, select the Picture Adjustment display. Adjust the brightness, picture and colour balance levels. • From the Picture Adjustment display select RESET to return to the factory settings.
Good picture, no sound	• Press the ◿ button on the remote control. • If 🔇 is displayed on the screen, press the 🔇 button on the remote control.
No colour on colour programmes	• Using the MENU system, select the Picture Adjustment display and adjust the colour setting. • From the Picture Adjustment display select RESET to return to the factory settings.
Distorted picture when changing programmes or selecting Teletext	• Turn off any equipment connected to the scart connectors on the rear of the TV.
Remote control does not function	• Replace the batteries.
The standby indicator ⏻ on the TV flashes	• Contact your nearest Sony service centre.
Interference on picture from external equipment	• Reduce sharpness level.

- **If you continue to have these problems, have your TV serviced by qualified personnel.**
- **NEVER open the casing yourself.**

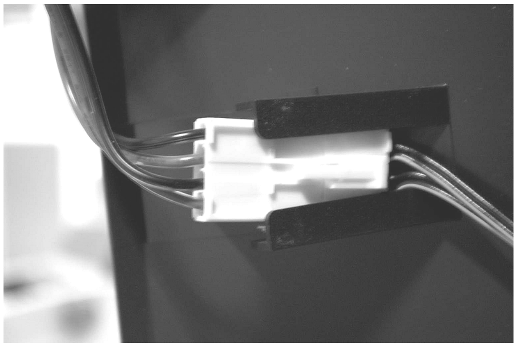
SECTION 2 DISASSEMBLY

2-1. Rear Cover Removal



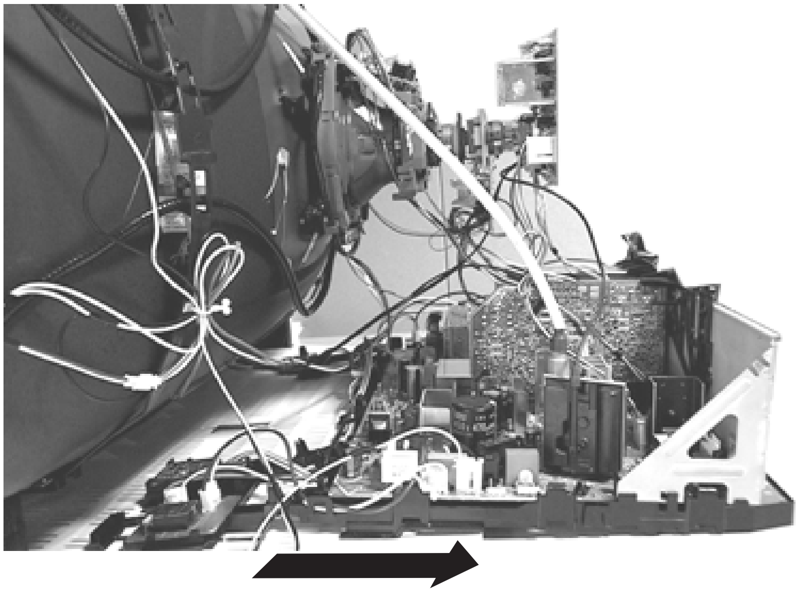
Remove the rear cover fixing screws indicated. Take care when removing the rear cover not to damage the speaker cables [Disconnect the speaker connector] as speakers are fitted inside the rear cover.

2-2. Speaker Connector Disconnection

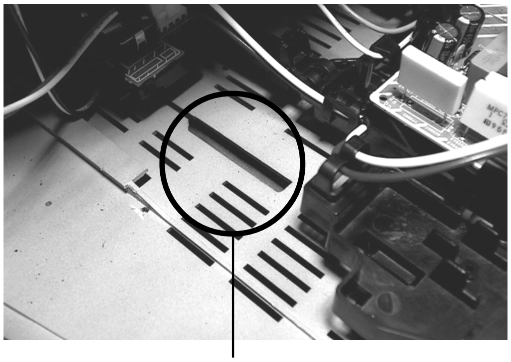


Before completely removing the rear cover disconnect the speaker connector which is located on the inside.

2-3. Chassis Removal and Refitting

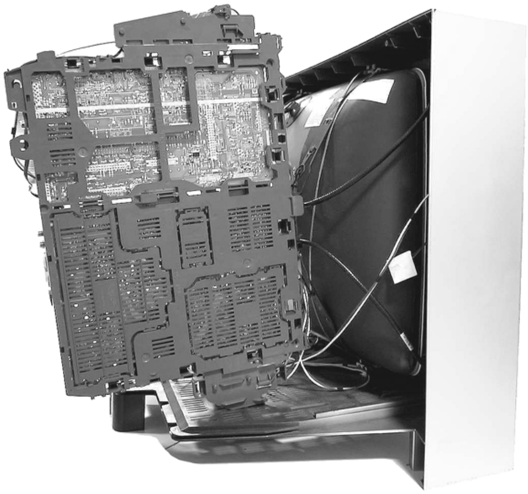


To remove lift the main bracket rear slightly and slide the chassis away from the beznet. Ensure that the interconnecting leads are released from their purse locks to prevent damage being caused.



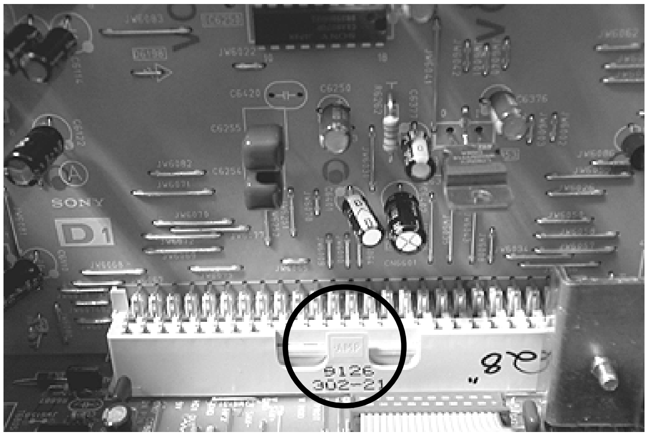
When refitting the chassis ensure that the main bracket is located in the beznet guide slots before sliding the chassis forwards. Refit the interconnecting leads in their respective purse locks.

2-4. Service Position



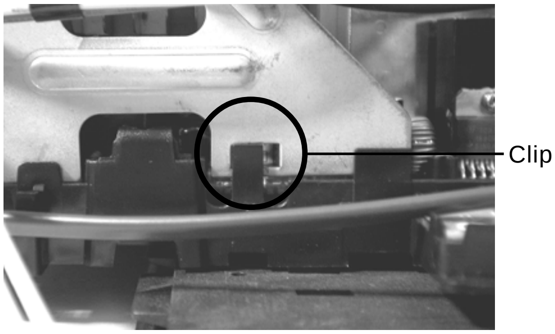
Position the PWB as indicated to access the solder side.
To gain access to the D Board follow the instructions on page 19. [Removal and Replacement of the main bracket bottom plates].

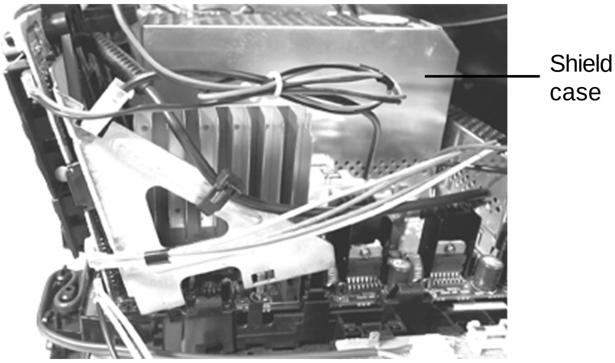
2-5. D1 Board Removal



To remove the D1 Board release the clip circled and gently remove the board in a vertical direction.

2-6. J Board Removal

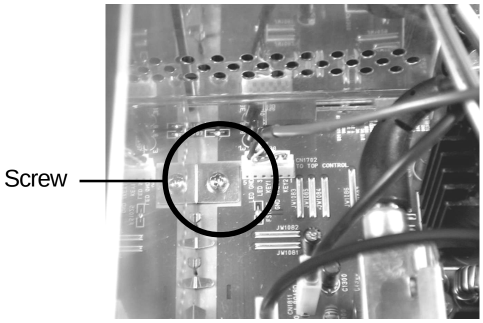




Release the two metal bracket support clips located on either side of the chassis. Tilt the bracket very slightly away from the shield case indicated. Release the J board board socket retaining clip and carefully lift the complete assembly vertically.

2-7. B2 Board Removal

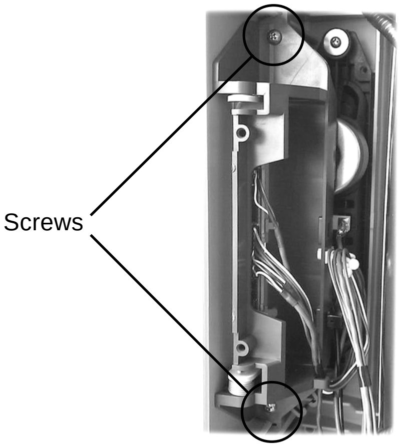
Follow the steps indicated in removal of the J board. With the assembly removed access to the B2 board shield is possible. To remove the shield locate and remove the two screws positioned on either side and at opposite ends of the shield. Release the B2 board clip and remove in a vertical direction. Please ensure that the screws are refitted after service.



Note :
Removal of the B2, E, and M1 printed circuit boards follows the same procedure of releasing the securing clips as indicated in the fig for D1 board removal.
Take care not to apply to great a pressure to the clips as this may cause damage.

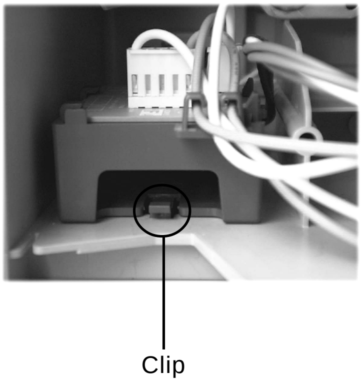
2-8. Side Control Module Removal

Remove the two screws fixing the user control module to the side of the set. The control module can then be removed by sliding it towards the rear of the set allowing access to the H7 Board.



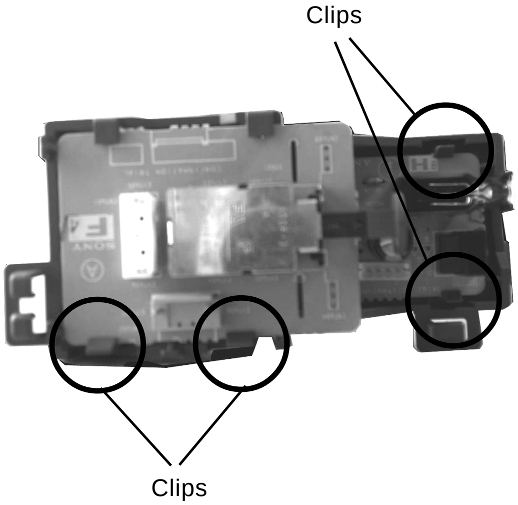
2-9. F4 Bracket Removal

Rrelease the clip circled and pull the bracket towards the rear of the set. The bracket can then be removed to allow access to the boards.



2-10. F4 and H8 Board Removal

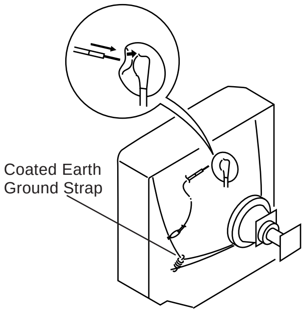
To remove the F4 and H8 Boards release the clips circled and ease the boards gently away from the support bracket.

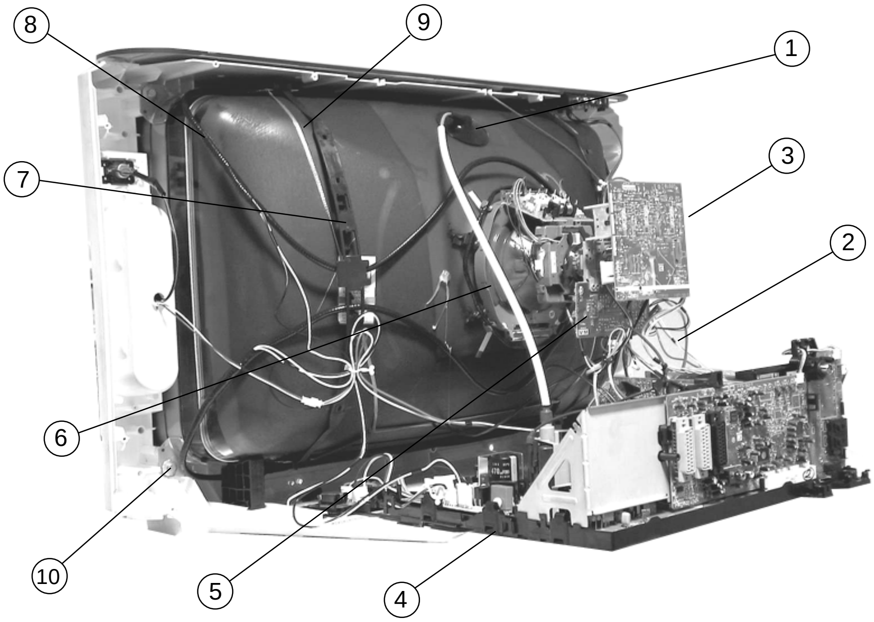


2-11. Picture Tube Removal

WARNING:
BEFORE REMOVING
THE ANODE CAP

High voltage remains in the CRT even after the power is disconnected. To avoid electric shock, discharge CRT *before* attempting to remove the anode cap. Short between anode and CRT coated earth ground strap.

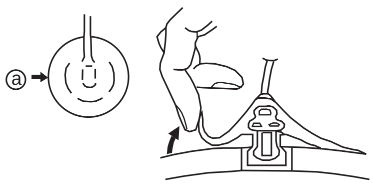




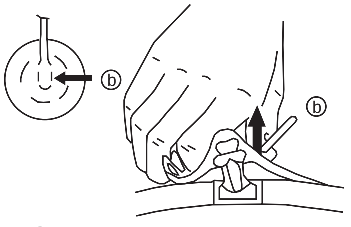
1. Discharge the anode of the CRT and remove the anode cap.
2. Unplug all interconnecting leads from the Deflection yoke, neck assy, degaussing coils and CRT grounding strap.
3. Remove the C Board from the CRT.
4. Remove the chassis assembly.
5. Loosen the Neck assembly fixing screw and remove.
6. Loosen the Deflection yoke fixing screw and remove.
7. Place the set with the CRT face down on a cushion and remove the Degaussing Coil holders.
8. Remove the Degaussing Coils.
9. Remove the CRT grounding strap and spring tentioners.
10. Unscrew the four CRT fixing screws [located on each CRT corner] and remove the CRT.
    [Take care not to handle the CRT by the neck.]

Removal of the Anode-Cap

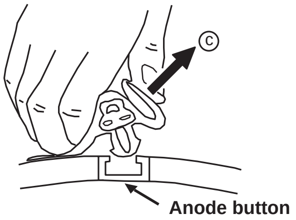
* **REMOVING PROCEDURES.**



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ



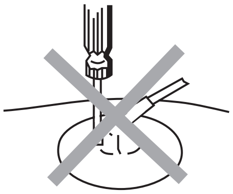
② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ

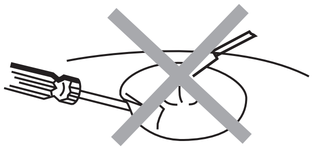


③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ

How to handle the Anode-Cap

1. To prevent damaging the surface of the anode-cap do not use sharp materials.
2. Do not apply too great a pressure on the rubber, as this may cause damage to the anode connector.
3. A metal fitting called a shatter hook terminal is fitted inside the rubber cap.
4. Do not turn the rubber foot over excessively, this may cause damage if the shatter hook sticks out.



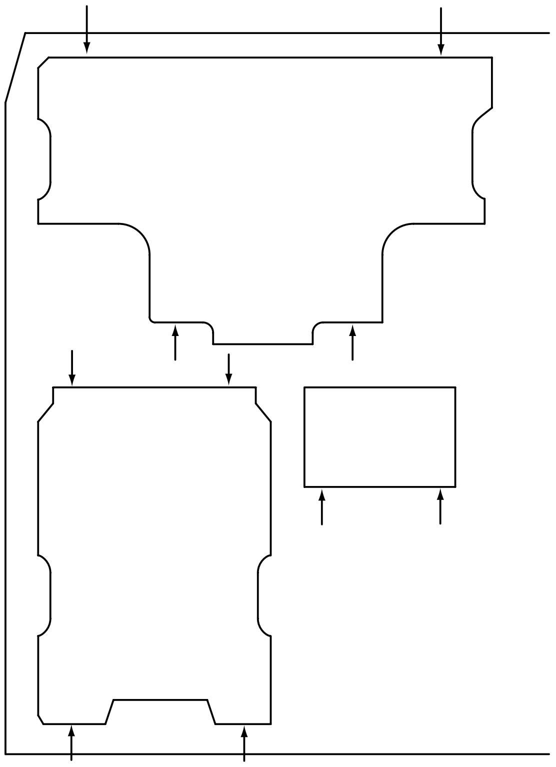


REMOVAL AND REPLACEMENT OF THE MAIN-BRACKET BOTTOM PLATES.

(1) REMOVING THE PLATES

In the event of servicing being required to the solder side of the D Board printed wiring board, the bottom plates fitted to the main chassis bracket require to be removed.
This is performed by cutting the gates with a sharp wire cutter at the locations indicated by the arrows.

Note : There are 3 plates fitted to the main bracket and secured by3 gates.
Only remove the necessary plate to gain access to the printed wiring board.

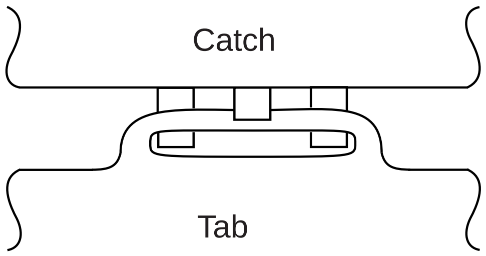


⚠ For safety reasons, on no account should the plates be removed and not refitted after servicing.

(2) REFITTING THE PLATES

Because the plates differ in size it is important that the correct plates are refitted in their original location.

Please note that the plates need to be rotated 180 degrees from their cut position to allow the tabs to be fitted into their catch positions.



SECTION 3 SET-UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to the following settings :

Contrast .... normal

Brightness .... normal

Carry out the adjustments in the following order :

3-1. Beam Landing.
3-2. Convergence.
3-3. Focus.
3-4. White Balance.

Note : Test equipment required.

1. Color bar/pattern generator.
2. Degausser.
3. Oscilloscope.
4. Digital multimeter.

3-1. Beam Landing

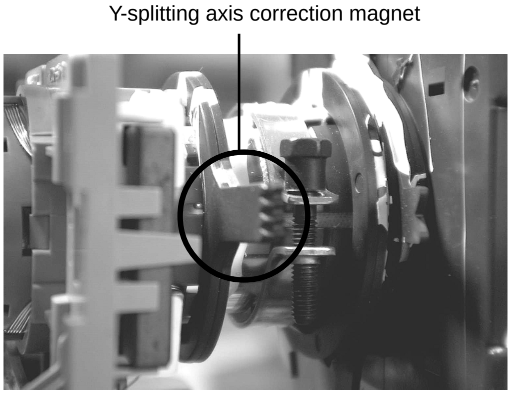
Preparation :

1. In order to reduce the influence of geomagnetism on the set's picture tube, face it in an easterly or westerly direction.
2. Switch on the TV set's power and degauss with a degausser.

(1) Adjustment of Correction Magnet for Y-Splitting Axis.

1. Input a crosshatch signal from the pattern generator.
2. Set the Picture control to minimum and confirm that the Brightness control is set to normal.
3. Position the neck assembly as indicated in Fig.3-3.
4. Loosen the deflection yoke fixing screw.
5. Move the deflection yoke as far forward as is possible.
6. Adjust the upper and lower pin symmetrically by opening or closing the Y-splitting axis correction magnets located on the neck assembly. [See Fig 3-1 and Fig 3-2]
7. Return the deflection yoke to its original position and re-tighten its fixing screw.

Fig.3-1



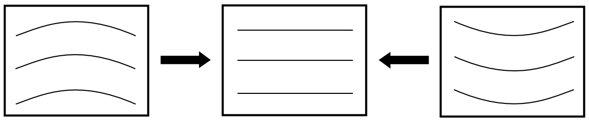


Fig.3-2

Caution :

High voltages are present on the Deflection yoke terminals - take care when handling the Deflection yoke whilst carrying out adjustments.

(2) Landing

Note : Before carrying out the following adjustments adjust the magnets as indicated below [See Fig.3-4].

1. Input a crosshatch signal from the signal generator.
2. Rough-adjust the focus and horizontal convergence.
3. Switch from the crosshatch pattern to an all-red pattern.
4. Move the deflection yoke backwards and adjust with the purity magnet so that the red is at the centre and it aligns symmetrically [See Fig.3-5].
5. Move the deflection yoke forward to the point where the entire screen just becomes red [Mark its position].
6. Move the deflection yoke further forward until the screen just changes colour at the edges. [Mark its position]
7. Position the deflection yoke between the two marks indicated above.
8. Input a crosshatch pattern from the pattern generator and rotate the deflection yoke so that the horizontal lines are parallel with the top and bottom of the screen.
9. When the position of the deflection yoke has been determined, fasten it with its fixing screw.
10. Switch the pattern generator to green then blue and confirm the purity.
11. If the beam does not land correctly in all the corners of the screen, use disk magnets to correct it. [Confirm the corner landing for green and blue]

Fig.3-3

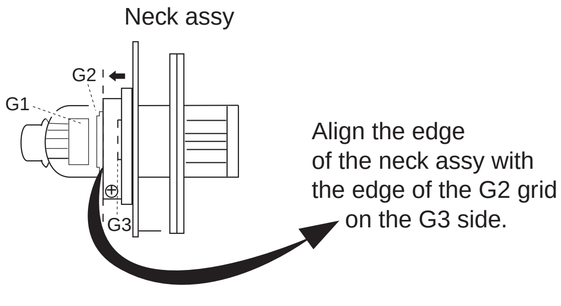
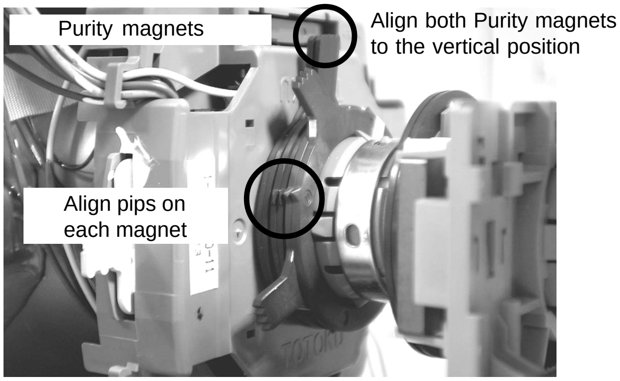

Neck assy
G2
G1
G3
Align the edge of the neck assy with the edge of the G2 grid on the G3 side.

Fig.3-4


Purity magnets
Align both Purity magnets to the vertical position
Align pips on each magnet

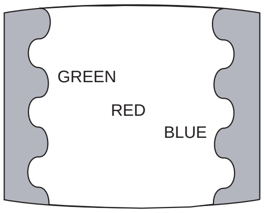
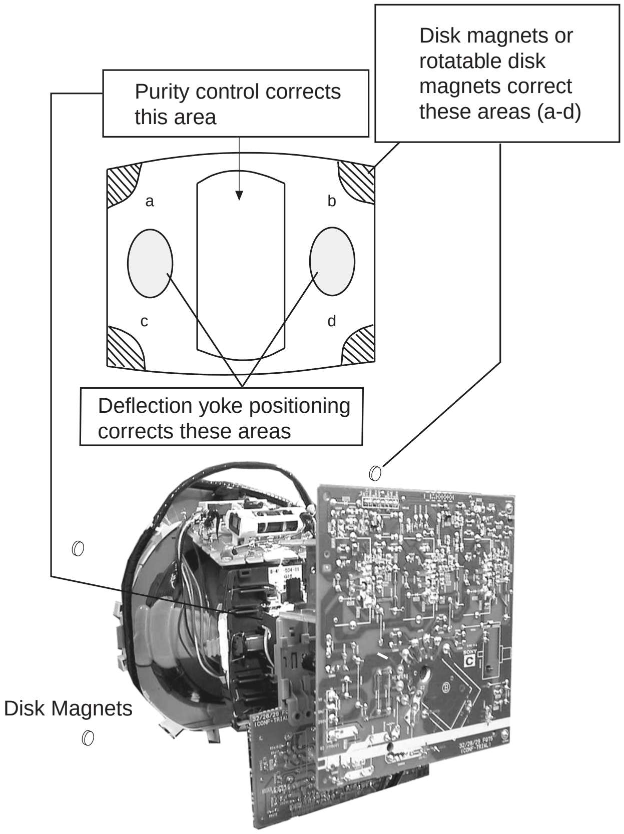
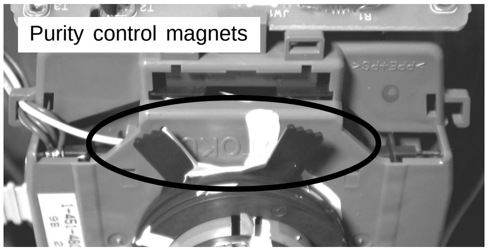

GREEN
RED
BLUE

Fig.3-5

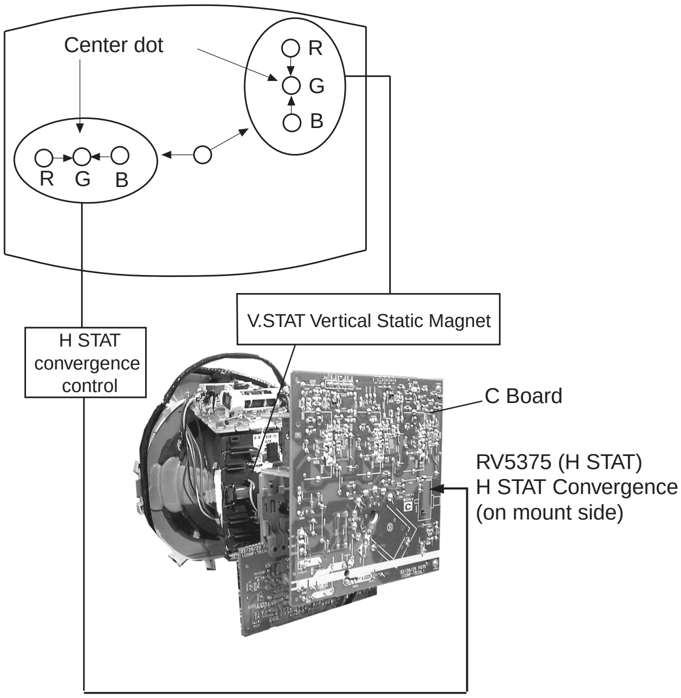

Disk magnets or rotatable disk magnets correct these areas (a-d)
Purity control corrects this area
a
b
c
d
Deflection yoke positioning corrects these areas
Disk Magnets


Purity control magnets

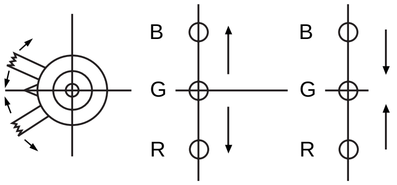
3-2. Convergence

(1) Screen centre convergence [Static convergence]

1. Input a dot pattern signal from the pattern generator.
2. Normalize the picture setting.
3. [Moving vertically], adjust the V.STAT magnet so that the vertical red, green and blue dots coincide at the centre of the screen.


Center dot
R
G
B
R G B
H STAT convergence control
V.STAT Vertical Static Magnet
C Board
RV5375 (H STAT)
H STAT Convergence
(on mount side)

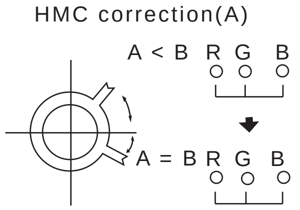
By opening or closing the V.STAT magnet, the red green and blue dots move in the direction indicated below.



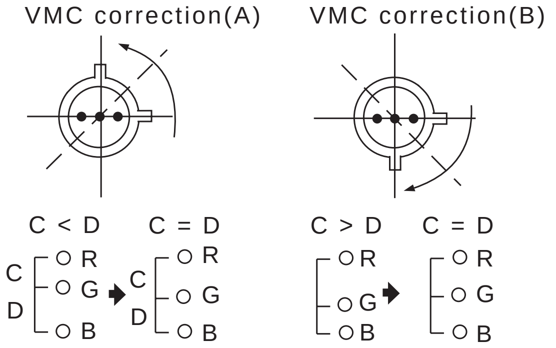
Note: Do not adjust the H.STAT by rotating the V.STAT magnets as this can affect the focus setting.

4. Correction for HMC [Horizontal mis-convergence] and VMC [Vertical mis-convergence] by using the BMC [Hexapole] magnet.

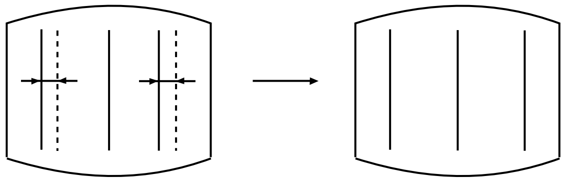
a). HMC correction by BMC [Hexapole] magnet and movement of the electron beam.


HMC correction(A)
A < B R G B
A = B R G B
HMC correction(B)
A > B R G B
A = B R G B

b). VMC correction by BMC [Hexapole] magnet and movement of the electron beam.

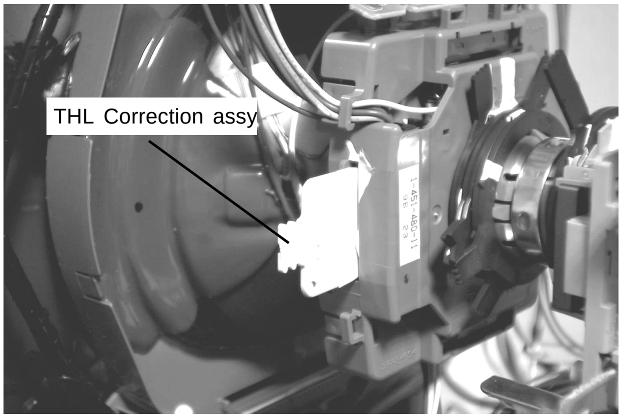

VMC correction(A)
VMC correction(B)
C < D
C = D
C > D
C = D
C
D
R
G
B

HAMP Adjustment

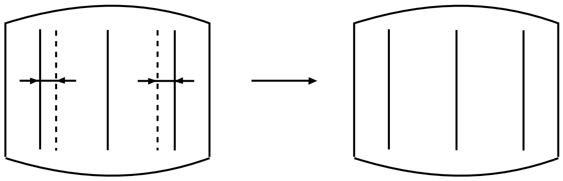


Adjust the HAMP using HAMPL and HAMPR registers in the Dynamic Convergence section of the service menu.

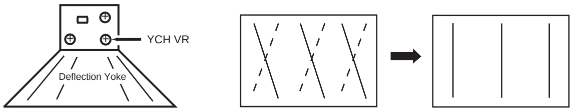
HTIL Adjustment


THL Correction assy

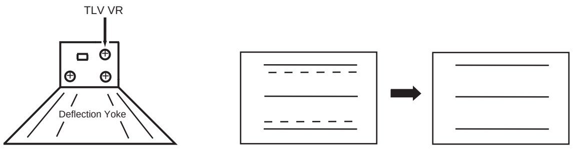
HTIL correction can be performed by adding a THL correction assembly to the Deflection yoke.



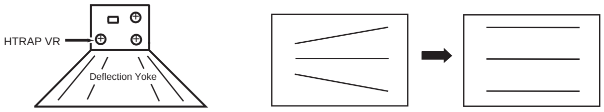
YCH Adjustment


YCH VR
Deflection Yoke

TLV Adjustment

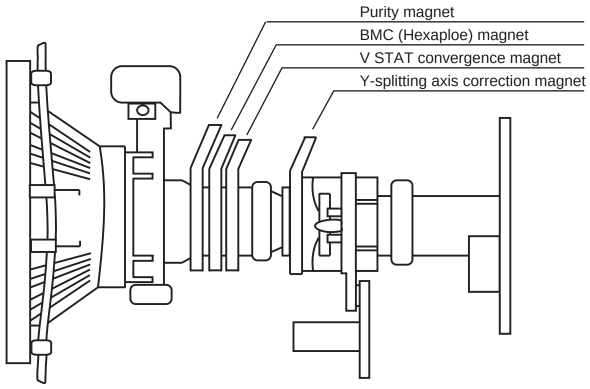

TLV VR
Deflection Yoke

H-TRAP Adjustment

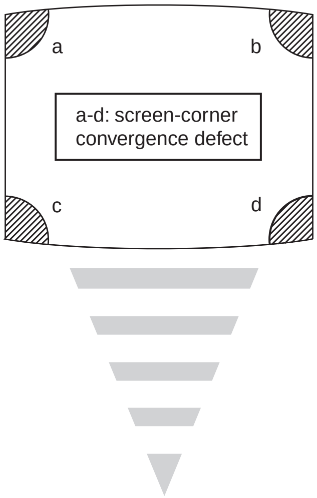

HTRAP VR
Deflection Yoke

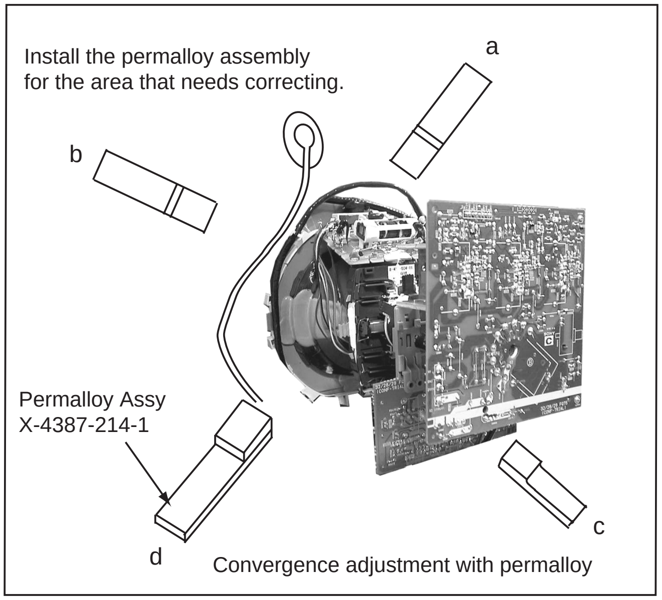
The H-TRAP should not be adjusted unless absolutely necessary as it affects the TLV settings.

Layout of each control


Purity magnet
BMC (Hexaploe) magnet
V STAT convergence magnet
Y-splitting axis correction magnet

Note : If you are unable to adjust the corner convergence properly, this can be corrected with the use of permalloy magnets.

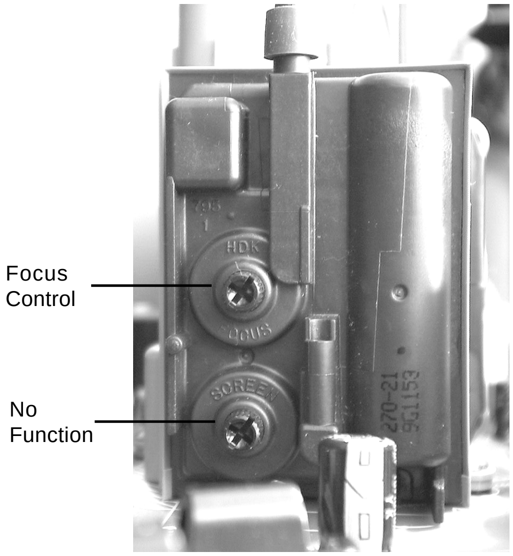

a
b
a-d: screen-corner convergence defect
c
d


Install the permalloy assembly for the area that needs correcting.
a
b
Permalloy Assy
X-4387-214-1
c
d

Convergence adjustment with permalloy

3-3. Focus, Screen (G2) Adjustment

1. Receive a television broadcast signal.
2. Normalize the picture setting.
3. Adjust the focus control located on the flyback transformer to obtain the best focus at the centre of the screen.
   Bring only the centre area of the screen into focus, the magenta-ring appears on the screen. In this case, adjust the focus to optimize the screen uniformly.


Focus Control
No Function

G2 adjustment [RV5376]

1. Input a dot signal from the pattern generator.
2. Set the Picture, Brightness and Colour to minimum.
3. Apply 170V DC from an external power supply to the R, G and B cathodes of the CRT.
4. Whilst watching the picture, adjust the G2 control RV5376 [SCREEN] located on the C Board to the point just before the flyback return lines disappear.

3-4. White Balance Adjustment

[Adjustment in the service mode using the remote commander]

White balance adjustment for TV mode

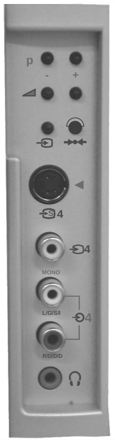
1. Input an all-white signal from the pattern generator.
2. Enter into the ‘Service Mode’ by pressing ‘TEST’, ‘TEST’ and ‘MENU’ ‘MENU’ on the Service Commander.
3. Select ‘Backend’ from the on screen menu display and press ‘OK’.
4. The ‘Backend’ menu will appear on the screen.[See Page 26]
5. Set the ‘Contrast’ to MAX.
6. Set the ‘R-Drive’ to 41.
7. Adjust the ‘G-Drive’ and the ‘B-Drive’ so that the white balance becomes optimum.
8. Press the ‘OK’ button to write the data for each item.
9. Set the ‘Contrast’ to MIN.
10. Set the ‘R-Cutoff’ to 31.
11. Adjust the ‘G-Cutoff’, and the ‘B-Cutoff’ with the left and right buttons on the remote commander so that the white balance becomes optimum.
12. Press the ‘OK’ button to write the data for each item.

SECTION 4 CIRCUIT ADJUSTMENTS

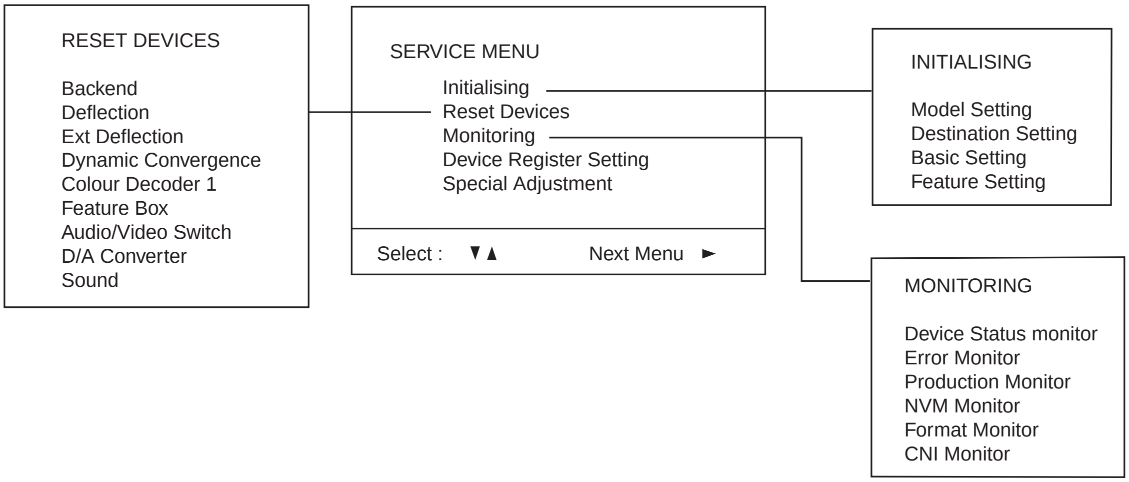
4-1. Electrical Adjustments

Service adjustments to this model can be performed using the supplied Remote Commander RM-887.

How to enter into the Service Mode



1. Turn on the main power switch of the set while pressing P + (plus) and P - (minus) buttons on the side pop out control panel.
2. When the picture appears release the P+ and P- buttons.
3. ‘TT’ will appear in the upper right corner of the screen.
4. Press the ‘MENU’ button twice on the remote commander to obtain the service menu on the screen.


RESET DEVICES
Backend
Deflection
Ext Deflection
Dynamic Convergence
Colour Decoder 1
Feature Box
Audio/Video Switch
D/A Converter
Sound
SERVICE MENU
Initialising
Reset Devices
Monitoring
Device Register Setting
Special Adjustment
Select : ▼▲
Next Menu ►
INITIALISING
Model Setting
Destination Setting
Basic Setting
Feature Setting
MONITORING
Device Status monitor
Error Monitor
Production Monitor
NVM Monitor
Format Monitor
CNI Monitor

4. Push the joystick up or down on the remote commander to select the adjustment item.
5. Push the right button to proceed to the next menu.
6. If the required adjustment item is ‘Deflection’, push the down button to move to ‘Deflection’.
7. Push the joystick to the right to enter into ‘Deflection’.
8. Change the data in order to comply with each standard.

Note :

- Before performing any adjustments ensure that the correct model has been selected in the ‘Model Setting’ menu.
- After carrying out the service adjustments, to prevent the customer accessing the ‘Service Menu’ switch the TV set OFF and then ON.

Initialising Menu

Initialising

Model Setting
Destination Setting
Basic Setting
Feature Setting

Select :　　Next menu:

Model Setting

The menu contains a list with all the available models of this software to set up the TV set in an easy way. The selection of a model is setting data for its features and hardware resources which cannot be detected by the automatic power on H/W detection as well as a special *model byte* to get an unique model identification for models which cannot be differed by features and hardware resources (e.g. KV-28FC60 and KV-28FC60Z)

Before data is set, the user will be asked if he really wants to set a new model. If the user agrees, automatically the destination setting menu is shown.

Model Setting

1	KV-28FC60	Reset
2	KV-28FC60Z	
3	KV-29FC60	
4	KV-32FC60	
5	KV-32FC60Z	
6	KV-34FC60	
7	KV-28FQ75	
8	KV-29FQ75	
9	KV-32FQ75	
10	KV-34FQ75	
11	KV-28FS70	
12	KV-32FS70	
13	KV-36FS70	
14	KV-28FX65	
15	KV-29FX65	
16	KV-32FX65	
17	KV-29FQ65	

BLACK = No Conformity
GREEN = Compatible Model
RED = Conformity for all data

Table.4-1

Indication of Model Compatibility.

Black:
If any data does not match to specific model, the model name is displayed in black.
Green:
All data which is checked by model setting menu concurs to model except model byte.
Red:
All data which is checked by model setting menu concurs to model including model byte.

Note:
After selecting a model, it may be necessary to reset some devices to get the correct data. (Treble/Bass Offset of Sound, deflection adjustments, ...)

Basic Setting

Basic setting

No	Descr	Min	Max	Data
1	Sys.B/G	OFF	ON	ON
2	Sys.D/K	OFF	ON	ON
3	Sys.L	OFF	ON	OFF
4	Sys.I (UK)	OFF	ON	OFF
5	Sys.I (IRL)	OFF	ON	ON
6	TXTNat.option	1	4	3
7	16:9 CRT	OFF	ON	OFF
8	Sub-woofer	OFF	ON	ON
9	Auto stand-by	OFF	ON	ON
10	Comb-filter	OFF	ON	OFF
11	Auto YC det	OFF	ON	ON
12	Auto comb det	OFF	ON	OFF
13	AV2 Available	OFF	ON	ON
14	AV3 Available	OFF	ON	ON
15	AV4 Available	OFF	ON	ON
16	AV3 Fr & rear	OFF	ON	OFF
17	SECAM Tape	OFF	ON	OFF
18	AV1 Sound Mute	OFF	ON	OFF

Table.4-2

Feature Setting

Feature setting

No	Descr	Min	Max	Data
1	EPG	OFF	ON	ON

Table.4-3

Device Register Setting

Backend
Deflection
Ext Deflection
Dynamic Convergence
Colour Decoder 1
D/A Converter
Feature High End
Audio / Video Switch
Sound

Table.4-4

Audio / Video Switch

No	Descr	Def	Min	Max	Data
1	CVOUT1	0	0	7	0
2	CVOUT2	2	0	7	2
3	GD1 SW	OFF	OFF	ON	OFF
4	GD2 SW	OFF	OFF	ON	OFF
5	YCOUT 1	0	0	7	0
6	YCOUT 2	1	0	7	1
7	LO0CTRL	OFF	OFF	ON	OFF
8	LO1CTRL	OFF	OFF	ON	OFF
9	AOUT 1	3	0	7	3
10	AOUT 2	3	0	7	3
11	AOUT 3MUTE	OFF	OFF	ON	OFF
12	ZCD SW	ON	OFF	ON	ON
13	AOUT 3	3	0	7	3
14	GROUP DEL	15	0	31	15
15	AOUT3 L/R	0	0	3	0
16	AOUT3VOLF	0	0	7	0
17	AOUT3VOLC	3	0	7	3

Table.4-5

Special Adjustment

No	Descr	Min	Max	Data
1	RGB level	0	7	0
2	RGB Gain	0	31	8
3	RGB PatLevel	0	7	0
4	RGB Patgain	0	31	15
5	Extra Fw	0	255	255
6	EPG Chks Check	OFF	ON	ON
7	Slicer High	OFF	ON	ON
8	FCW Wide	OFF	ON	ON
9	Mpeg NR	OFF	ON	OFF
10	Notch Filter	OFF	ON	OFF
11	NLD Step	-7	0	0
12	PKD Step	-15	0	0
13	CRD Step	0	15	7
14	SHP Step	-10	0	-3
15	COL Step	-10	0	-1
16	SHP gain Step	-5	0	0
17	VM level Step	-3	0	0
18	NTSC Auto YC AV2	OFF	ON	OFF
19	NTSC Auto YC AV3	OFF	ON	OFF
20	RGB Disable	OFF	ON	OFF
21	Intern GD	OFF	ON	ON
22	AV2 YC Mix Out	OFF	ON	ON

Table.4-6

Backend

No	Descr	Def	Min	Max	Data
1	R-on	ON	OFF	ON	ON
2	G-on	ON	OFF	ON	ON
3	B-on	ON	OFF	ON	ON
4	D-col	OFF	OFF	ON	OFF
5	Color-axis	2	0	3	2
6	Contrast	40	0	63	40
7	Limit-Luv	3	0	3	3
8	Hue	32	0	63	32
9	Colour	31	0	63	31
10	CTI-Level	2	0	3	2
11	Brightness	31	0	63	31
12	Gamma	3	0	3	3
13	Sharpness	30	0	63	30
14	R-Drive	41	0	63	41
15	G-Drive	41	0	63	30
16	B-Drive	41	0	63	23
17	ABL-Mode	0	0	3	0
18	Sub Bright	31	0	63	22
19	VM-Level	2	0	3	1
20	R-Cutoff	31	0	63	31
21	Preover	2	0	3	2
22	G-Cutoff	31	0	63	23
23	DPIC-Level	1	0	3	1
24	B-Cutoff	31	0	63	29
25	DC-Tran	0	0	3	0
26	Sub-Cont	7	0	15	9
27	LRGB2-Lvl	8	0	15	0
28	P-Abl	15	0	15	15
29	Sharp.Fo	ON	OFF	ON	ON
30	Aging-W	OFF	OFF	ON	OFF
31	Aging-B	OFF	OFF	ON	OFF
32	CB-offset1	11	0	15	11
33	CR-offset1	11	0	15	11
34	CB-offset2	7	0	15	7
35	CR-offset2	7	0	15	7
36	Sub Color	0	-8	8	-2

Table.4-7

Colour Decoder 1

No	Descr	Def	Min	Max	Data
1	Tint	31	0	63	31
2	P/N Gw	OFF	OFF	ON	OFF
3	P/N ID	OFF	OFF	ON	OFF
4	Sub Colour	7	0	15	7
5	Sub Contr	8	0	15	8
6	Sharp FO	1	0	3	1
7	Sharp EQ	2	0	3	2
8	Sharp Gain	8	0	15	8
9	Y-Out Lev	35	0	63	35
10	BS Point	0	0	3	0
11	C-Out Lev	45	0	63	45
12	DC Rest	0	0	3	0
13	BPF FO	2	0	3	2
14	BPF Q	1	0	3	1
15	Filter Sw	OFF	OFF	ON	OFF

Table.4-8

Colour Decoder 1 (cont)

No	Descr	Def	Min	Max	Data
16	C-Trap Sw	0	0	1	0
17	S-D Trap	ON	OFF	ON	ON
18	LPF	ON	OFF	ON	ON
19	Y-DL	8	0	10	8
20	N-Comb	ON	OFF	ON	ON
21	Video Sel	0	0	15	0
22	RGB Sel	0	0	3	0
23	Halftone	OFF	OFF	ON	OFF
24	CrOFF.1	7	0	15	7
25	CbOFF.1	7	0	15	7
26	CrOFF.2	7	0	15	7
27	CbOFF.2	7	0	15	7
28	VCD Freq	3	0	7	3
29	VCD Mode	0	0	3	1
30	AFC SENS	1	0	3	1
31	MVM	OFF	OFF	ON	OFF
32	S-R-Y Adj	6	0	15	6
33	S-B-Y Adj	4	0	15	4
34	BELL/HPF	2	0	3	2
35	BELL FO	OFF	OFF	ON	OFF
36	S-GP	0	0	3	0
37	S ID	OFF	OFF	ON	OFF
38	RGB1 ENB	OFF	OFF	ON	OFF
39	HS-PH	1	0	1	0
40	S/N RATIO	3	0	3	3

Table.4-9

Dynamic Convergence

No	Descr	Def	Min	Max	Data
1	Range	63	0	63	63
2	V Stat	36	0	63	17
3	H Stat	33	0	63	31
4	H amp L	37	0	63	33
5	H amp R	36	0	63	33
6	Up Y	31	0	63	31
7	Low Y	33	0	63	31
8	Y up L	30	0	63	45
9	Y up R	30	0	63	31
10	Y low L	31	0	63	31
11	Y low R	30	0	63	45
12	Mbow Up L	31	0	63	31
13	Mbow Up R	32	0	63	31
14	Mbow Low L	32	0	63	31
15	Mbow Low R	32	0	63	31
16	T Cor PCtrl	OFF	OFF	ON	OFF
17	Top Cor Pin	31	0	63	31
18	B Cor PCtrl	OFF	OFF	ON	OFF
19	Bot Cor Pin	43	0	63	31

Table.4-10

Sound

No	Descr	Def	Min	Max	Data
1	Ref.Level	40	0	20	40
2	Auto-gain	ON	OFF	ON	ON
3	Ana-in	0	0	1	0
4	Carr-mute	ON	OFF	ON	ON
5	Clock out	ON	OFF	ON	ON
6	AM-gain	ON	OFF	ON	ON
7	Clip mode	0	0	2	0
8	SCART1 Vol	79	0	127	79
9	SCART2 Vol	79	0	127	79
10	SCART Pr	27	0	127	27
11	I2S1-pr	16	0	127	16
12	I2S2-pr	16	0	127	16
13	FM pr	27	0	127	27
14	BG Nic-pr	53	0	127	53
15	L Nic-pr	59	0	127	59
16	DK Nic-pr	53	0	127	53
17	I Nic-pr	97	0	127	97
18	Irl Nic-pr	97	0	127	97
19	AVC-Decay	2	0	8	2
20	SubW-vol	0	-127	0	0
21	SubW-freq	20	5	40	20
22	SubW-HPass	OFF	OFF	ON	OFF
23	Spat-stre	+127	0	-1	127
24	Spat-Coeff	0	0	8	0
25	Bass offs	0	-3	+3	0
26	Treble offs	0	-3	+3	0
27	Loudn offs	0	0	9	0
28	Hp-Voloffs	-2	-5	+5	-2
29	M-S Limit	+30	-128	+127	30
30	M-B Limit	-30	-128	+127	-30
31	S-M Limit	+12	-128	+127	12
32	S-B Limit	-20	-128	+127	-20
33	B-M Limit	-12	-128	+127	-12
34	B-S Limit	+20	-128	+127	20
35	Err.Max	40	0	255	40
36	Err.Min	18	0	255	18
37	Vol.Offs	0	-6	0	-4

Table.4-11

Ext. Deflection

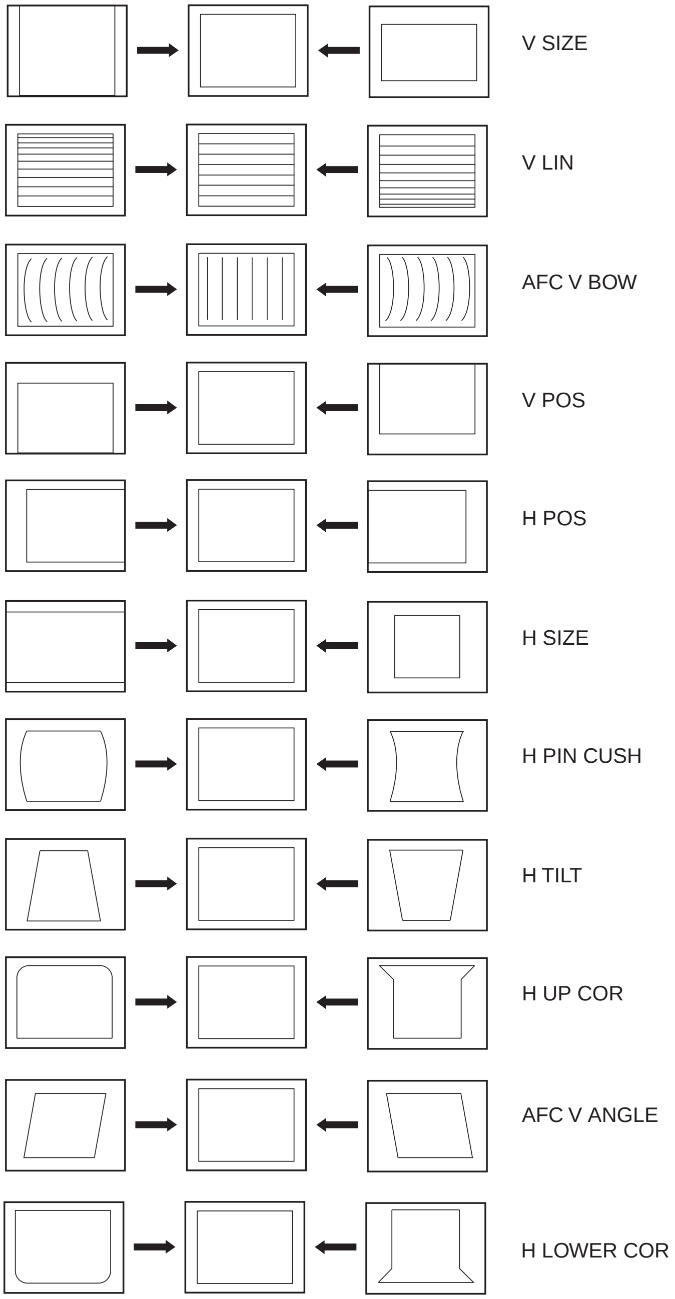
No	Descr	Def	Min	Max	Data
1	Linearity	127	0	255	127
2	H Centre	31	0	63	31
3	H Trap	31	0	63	31
4	Rotation	0	0	255	0
5	FocusPhase	127	0	255	127

Table.4-12

Deflection

No	Descr	Def	Min	Max	Data
1	V-Size	31	0	63	35
2	V-Position	31	0	63	30
3	V-Comp	1	0	3	0
4	V-Linear	7	0	15	7
5	S-Corr	7	0	15	7
6	H-Size	31	0	63	27
7	EW-DC	OFF	OFF	ON	OFF
8	Akb Tim2	OFF	OFF	ON	OFF
9	Pin-Amp	31	0	63	29
10	H-Comp	0	0	3	0
11	Up-Cpin	31	0	63	35
12	M-Pin	2	0	3	2
13	Lo-CPin	31	0	63	34
14	Trapezium	7	0	15	6
15	H-Position	31	0	63	25
16	VblKw	0	0	3	0
17	AFC-Bow	7	0	15	7
18	AFC-Angle	7	0	15	10
19	Left-Blk	38	0	63	52
20	Right-Blk	12	0	63	11
21	V-Freerun	0	0	3	0
22	V-Aspect	47	0	63	47
23	Zoom-Sw	OFF	OFF	ON	OFF
24	U-Scan	OFF	OFF	ON	OFF
25	V-Scroll	31	0	63	31
26	Akb-Tim	0	0	3	2
27	Up-Vlin	0	0	15	0
28	Lo-Vlin	0	0	15	0

Table.4-13



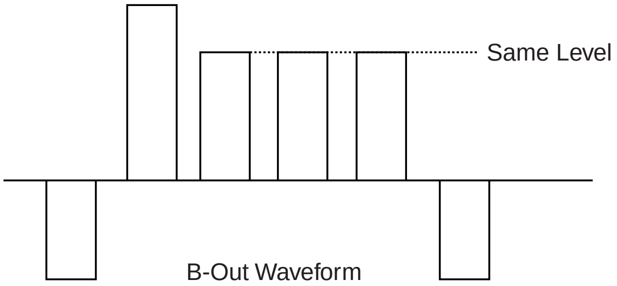
Deflection System Adjustment

1. Enter into the service mode and select ‘Deflection’ from the menu. The ‘Deflection’ adjustment menu will be displayed.
2. Select and adjust each item to obtain the optimum image.

4-2. Volume Electrical Adjustments

Sub Colour Adjustment

1. Input a PAL colour bar signal.
2. Connect an oscilloscope to CN5400 pin 5 located on the C Board.
3. Enter into the ‘Service Mode’.
4. Choose ‘Backend’ from the menu.
5. Adjust ‘Sub Colour’ data so that the right sides of the waveform are of equal height.



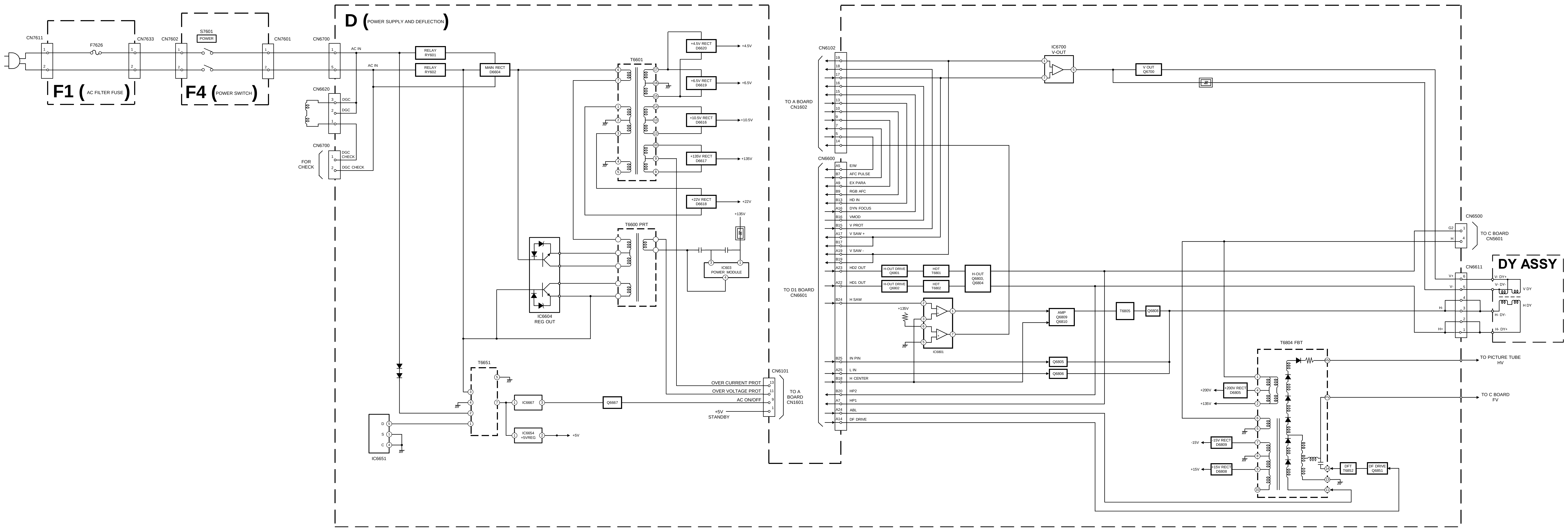
4-3.TEST MODE 2:

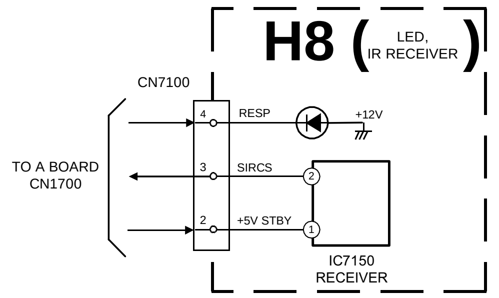
Is available by pressing the ‘TEST’ button twice, OSD ‘TT’ appears. The functions described below are available by selecting the two numbers. To release the ‘Test mode 2’, press 0, 10, 20 ... twice or switch the TV set into Stand-by mode. Pressing the two Local Control buttons (+ and -) during power ON will also switch into ‘TT’ mode.
In ‘TT’ mode, it is possible to remove the Menu from the screen by pressing the Speaker Off button once. Pressing the Speaker OFF button a second time will cause the Menu to reappear. The function is kept even when the menu is not displayed on screen !!.

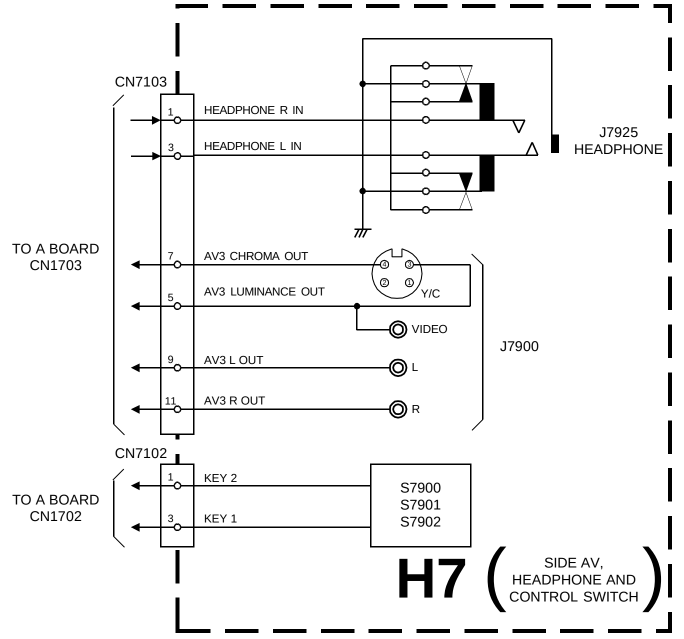
00	'TT' mode off
01	Picture maximum
02	Picture minimum
03	Set speaker/headphone Volume to 30%
04	Set speaker/headphone Volume to 50%
05	Set speaker/headphone Volume to 65%
06	Set speaker/headphone Volume to 80%
07	Ageing mode
08	Shipping Condition
10	No function
11	Sub picture adjustment
12	Sub colour adjustment
13	Display software version and TV set configeration
14	No function
15	Picture Rotation - Auto Function -5 -> 0 -> + 5
16	Picture level 50%
17	Audio mute on
18	No function
19	Sub brightness adjustment
20	No function
21	Destination A includes text settings, display TV status
22	Destination L includes text settings, display TV status
23	Destination E includes text settings, display TV status
24	Destination U includes text settings, display TV status
25	Destination D includes text settings, display TV status
26	Destination B includes text settings, display TV status
27	Destination K includes text settings, display TV status
28	Destination R includes text settings, display TV status
30	No function
31	Geometry Adjustment 1
32	Geometry Adjustment 2
33	Error monitor
34	No function
35	CRT 4:3 <> 16:9 ; Display TV status
36	Line 23 detection switch
37	Velocity Modulation (VM) test
38	No function
39	No function
40	No function
41	Screen mode check
42	Re-initialise geometry
43	No function
44	No function
45	No function
46	Reserved for dealer commander
47	Re-initialise NVM
48	Set NVM as non virgin
49	Set NVM as virgin
50	No function
51	Set Dolby volume to 90%
52	Dolby on left speaker only
53	Dolby on right speaker only
54	Dolby on left centre only
55	Dolby on surround speaker only
56	No function
57	No function
58	No function
59	No function
60	No function
61	Service mode
62	Production mode
63	Copy the picture reset data from ROM into the picture reset location of NVM
64	Copy the actual adj picture data from NVM to reset location of NVM
65	Reset error codes
66	No function
67	No function
68	Ignore error on
69	Ignore errors off
70	No function
71	No function
72	No function
73	Clear all programmes except 1-5 and all station labels
74	Adjustment for PIN Amp/Upper Corner Pin for EPG
75	Adjustment for Lower Corner Pin/ Trapezoid for EPG
76	No function
77	No function
78	No video blanking
79	Reset NVM Addresses 0EFF - 0FFF
80	No function
81	Smart Link test signal on AV2 Pin 10.
82	Horizontal centre adjustment for MID-X input main picture. Adjustment is done with left and right joystick button, released by "TV" or "OK" buttons.
83 - 86	No function
87	Personal ID reset
88	Parental Lock off
89	OSD mute on/off
90	No function
91	No function
92	No function
93	Reserved for software group only
94	No function
95	Dolby Low Pass Filter ON in surround channel
96	Dolby Low Pass Filter OFF in surround channel
97	No action
98	No action
99	No function

Memo

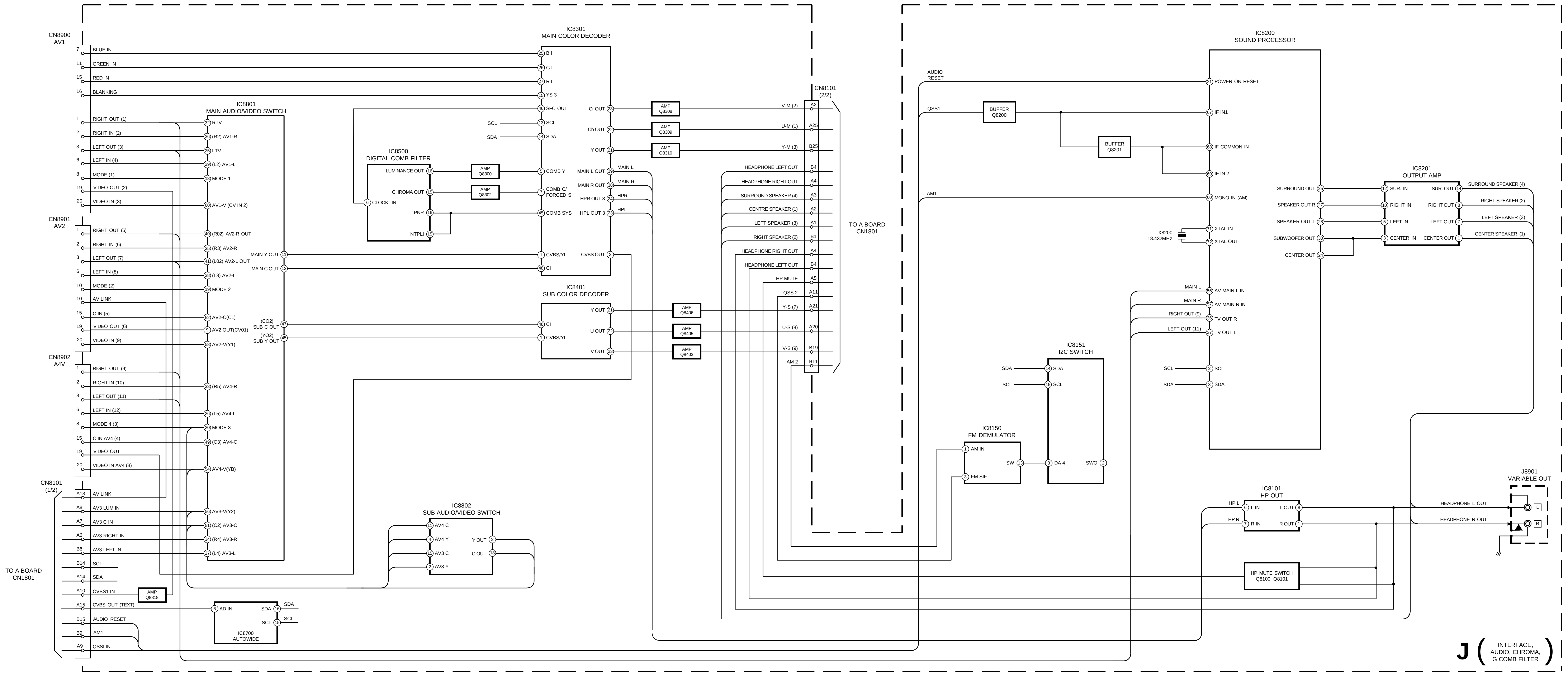
5-1. BLOCK DIAGRAMS (1)


F1 (AC FILTER FUSE)
CN7611
F7626
CN7633
F4 (POWER SWITCH)
CN7602
S7601
POWER
CN7601
D (POWER SUPPLY AND DEFLECTION)
CN6700
AC IN
AC IN
CN6620
DGC
DGC
CN6700
FOR CHECK
DGC CHECK
DGC CHECK
RELAY RY601
RELAY RY602
MAIN RECT D6604
T6601
+4.5V RECT D6620
+4.5V
+6.5V RECT D6619
+6.5V
+10.5V RECT D6616
+10.5V
+135V RECT D6617
+135V
+22V RECT D6618
+22V
+135V
T6600 PRT
IC603 POWER MODULE
IC6604 REG OUT
T6651
IC6651
D
S
C
IC6667
IC6654 +5VREG
+5V
Q6667
CN6101
OVER CURRENT PROT
OVER VOLTAGE PROT
AC ON/OFF
+5V STANDBY
TO A BOARD CN1601
TO A BOARD CN1602
CN6102
CN6600
TO D1 BOARD CN6601
E/W
AFC PULSE
EX PARA
RGB AFC
HD IN
DYN FOCUS
VMOD
V PROT
V SAW +
V SAW -
HD2 OUT
HD1 OUT
H SAW
IN PIN
L IN
H CENTER
HP2
HP1
ABL
DF DRIVE
IC6700 V-OUT
V OUT Q6700
H-OUT DRIVE Q6801
H-OUT DRIVE Q6802
HDT T6801
HDT T6802
H-OUT Q6803, Q6804
+135V
IC6801
AMP Q6809 Q6810
T6805
Q6808
Q6805
Q6806
T6804 FBT
+200V
+200V RECT D6805
+135V
-15V
-15V RECT D6809
+15V
+15V RECT D6808
DFT T6852
DF DRIVE Q6851
HV
FV
CN6500
G2
H
TO C BOARD CN5601
CN6611
V+
V-
H-
H+
DY ASSY
V- DY+
V- DY-
V DY
H DY
H- DY-
H- DY+
TO PICTURE TUBE HV
TO C BOARD FV

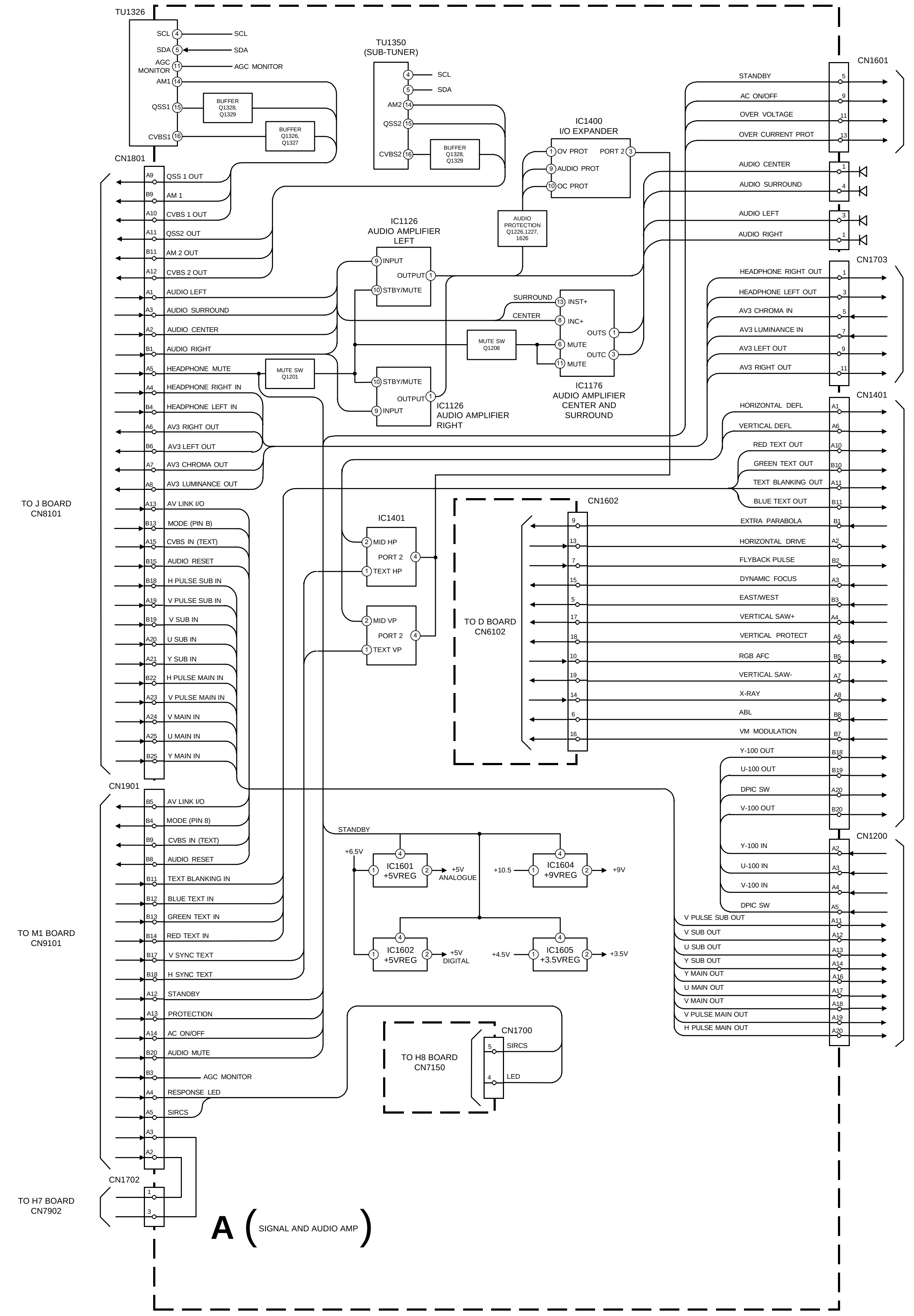

H8 (LED, IR RECEIVER)
CN7100
TO A BOARD CN1700
RESP
SIRCS
+5V STBY
+12V
IC7150 RECEIVER


CN7103
TO A BOARD CN1703
HEADPHONE R IN
HEADPHONE L IN
J7925 HEADPHONE
AV3 CHROMA OUT
AV3 LUMINANCE OUT
Y/C
VIDEO
AV3 L OUT
L
AV3 R OUT
R
J7900
CN7102
TO A BOARD CN1702
KEY 2
KEY 1
S7900 S7901 S7902
H7 (SIDE AV, HEADPHONE AND CONTROL SWITCH)

5-1. BLOCK DIAGRAMS (2)

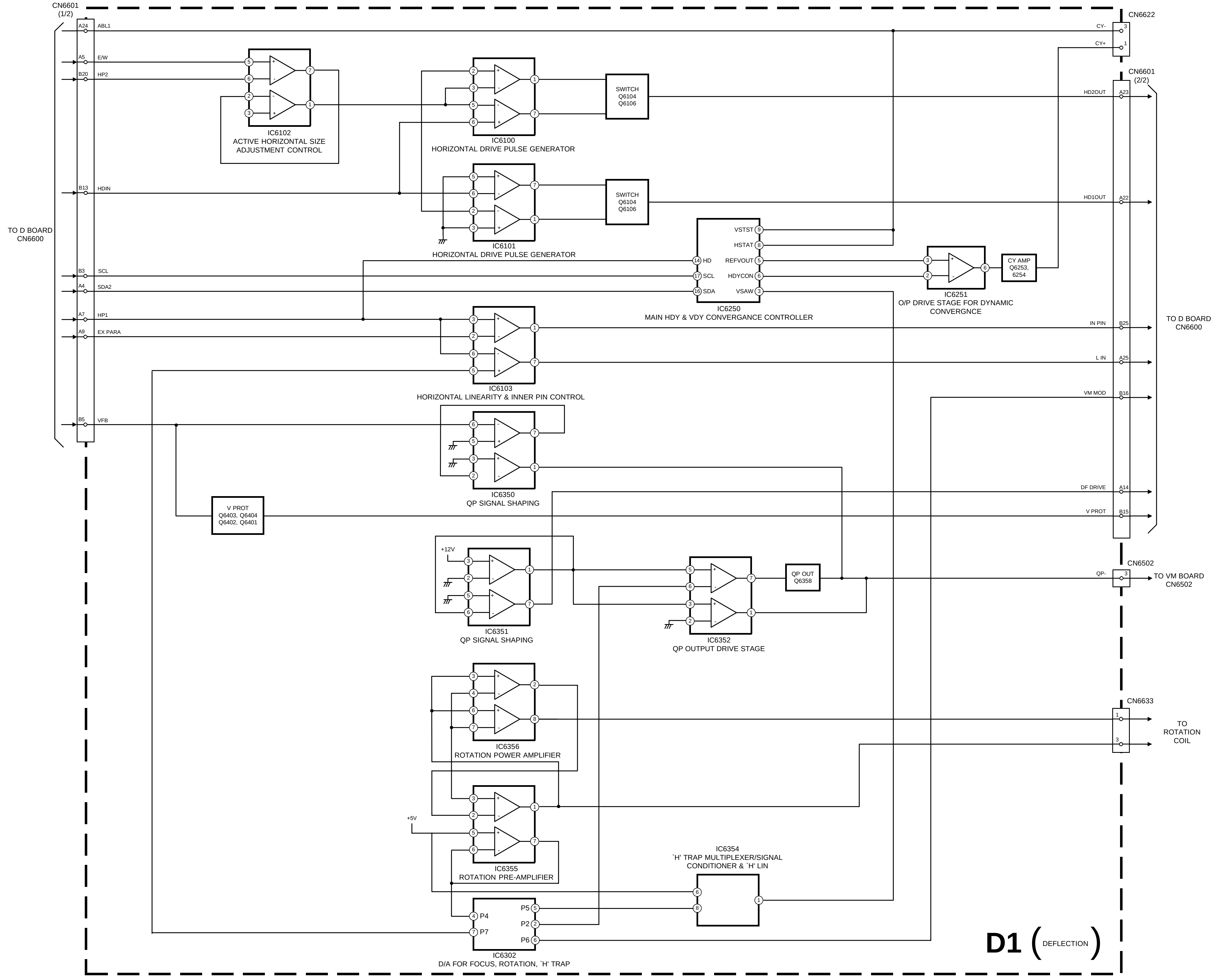


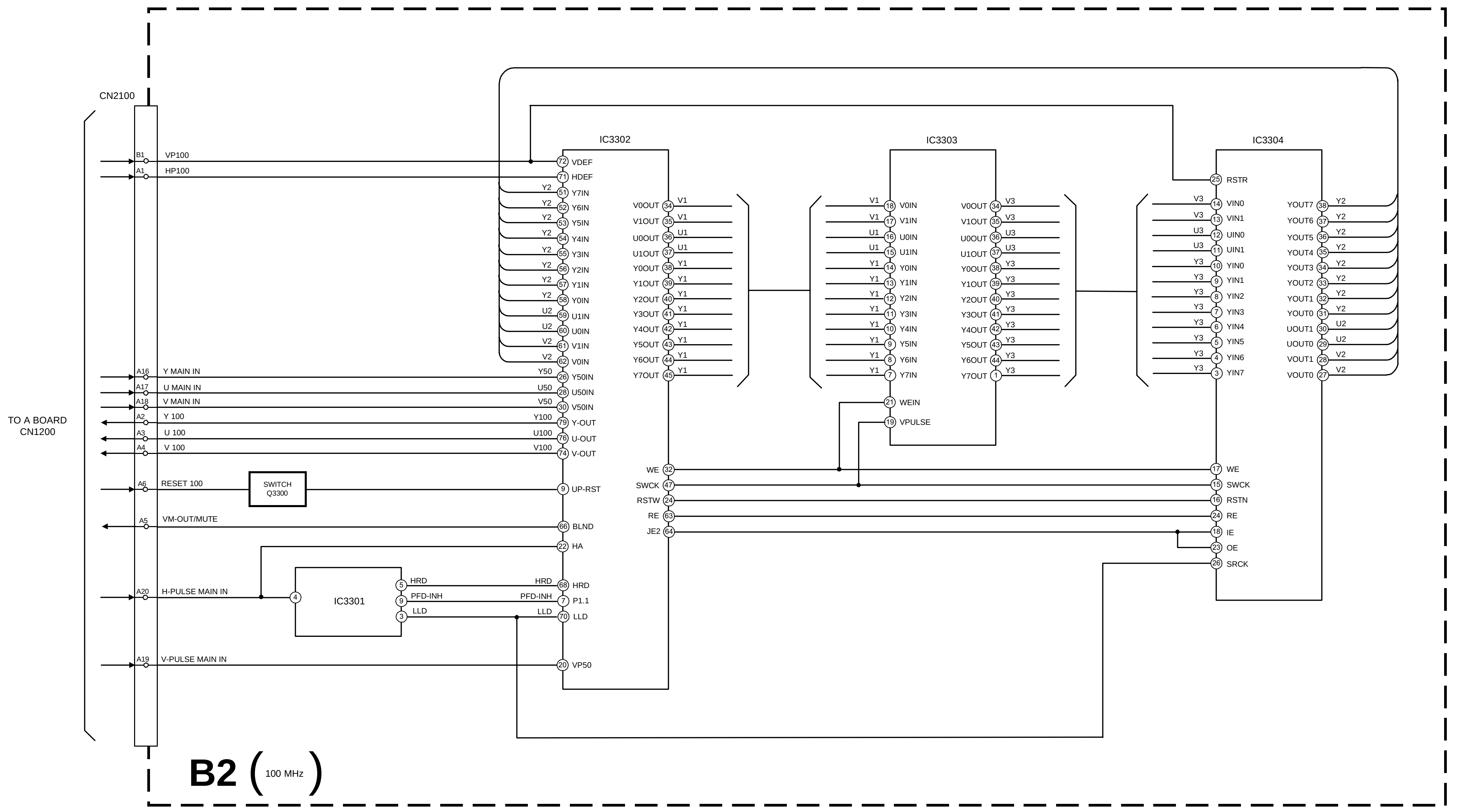
CN8900 AV1
CN8901 AV2
CN8902 A4V
CN8101 (1/2)
TO A BOARD CN1801
IC8801 MAIN AUDIO/VIDEO SWITCH
IC8500 DIGITAL COMB FILTER
IC8301 MAIN COLOR DECODER
IC8401 SUB COLOR DECODER
IC8802 SUB AUDIO/VIDEO SWITCH
IC8700 AUTOWIDE
CN8101 (2/2)
TO A BOARD CN1801
IC8200 SOUND PROCESSOR
BUFFER Q8200
BUFFER Q8201
IC8201 OUTPUT AMP
IC8151 I2C SWITCH
IC8150 FM DEMULATOR
IC8101 HP OUT
HP MUTE SWITCH Q8100, Q8101
J8901 VARIABLE OUT
J
INTERFACE, AUDIO, CHROMA, G COMB FILTER



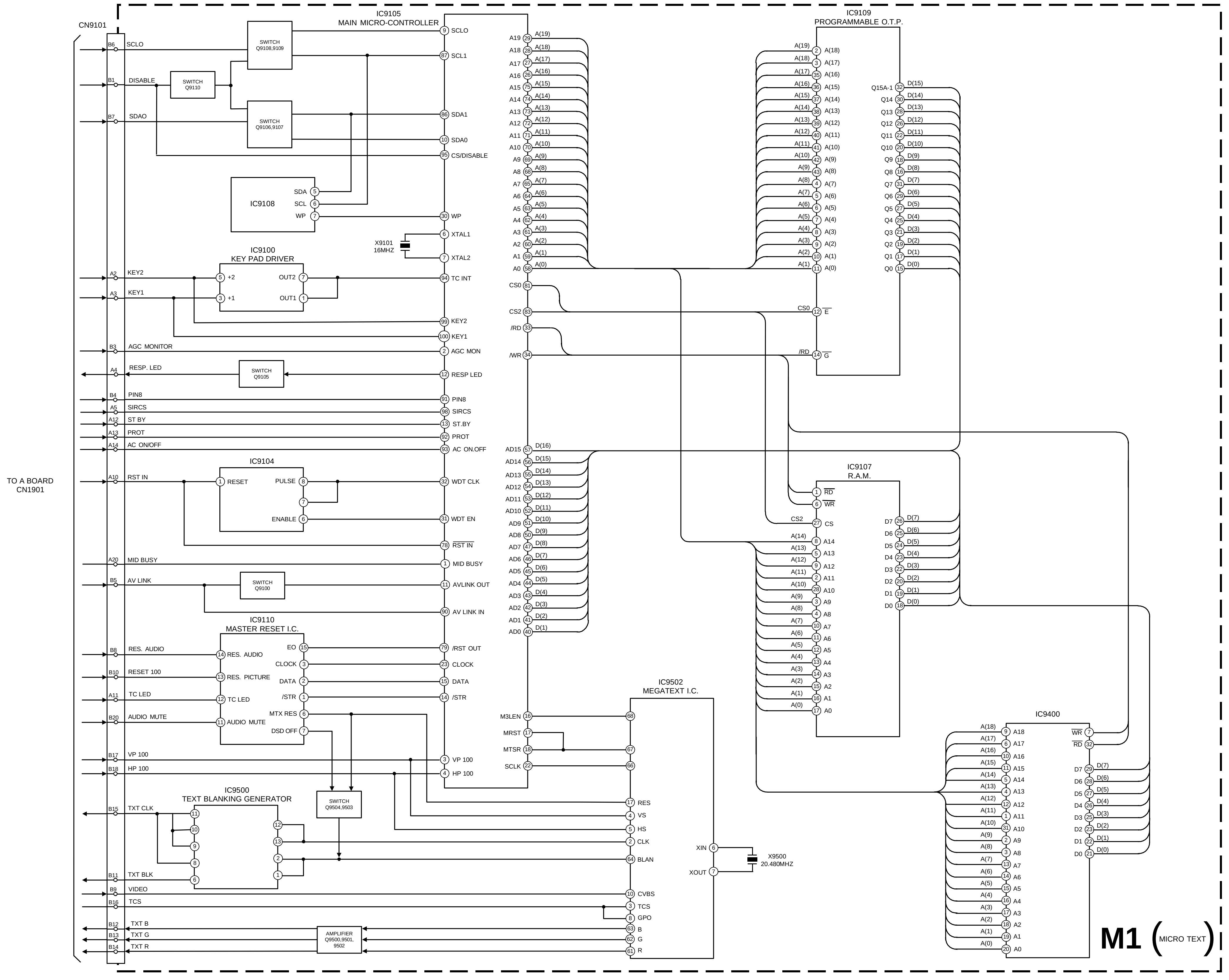
TU1326
TU1350 (SUB-TUNER)
CN1801
IC1400 I/O EXPANDER
IC1126 AUDIO AMPLIFIER LEFT
IC1126 AUDIO AMPLIFIER RIGHT
IC1176 AUDIO AMPLIFIER CENTER AND SURROUND
CN1601
TO D BOARD CN6101
CN1703
TO H7 BOARD CN7904
CN1401
TO E BOARD CN4101
TO J BOARD CN8101
IC1401
CN1602
TO D BOARD CN6102
CN1901
IC1601 +5VREG
IC1604 +9VREG
IC1602 +5VREG
IC1605 +3.5VREG
CN1200
TO B2 BOARD CN2150
TO M1 BOARD CN9101
TO H8 BOARD CN7150
CN1700
CN1702
TO H7 BOARD CN7902
A
SIGNAL AND AUDIO AMP

5-1. BLOCK DIAGRAMS (3)

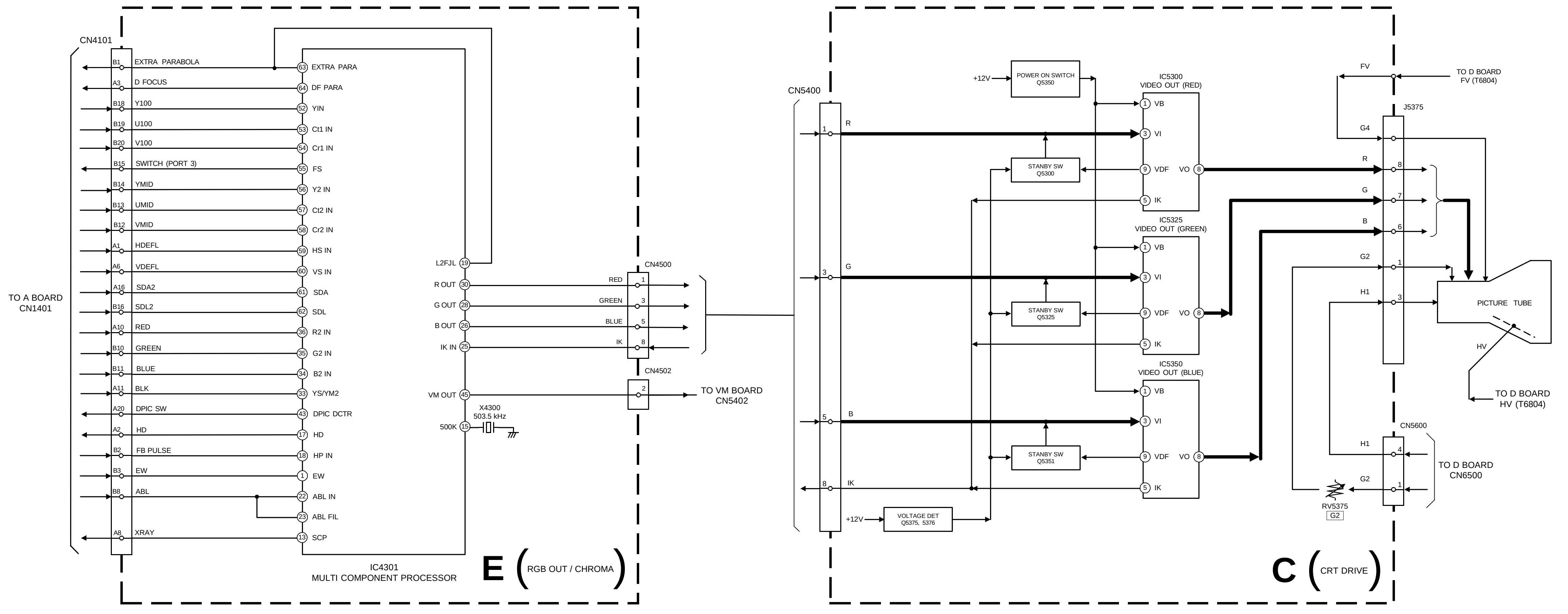

CN6601 (1/2)
A24 ABL1
A5 E/W
B20 HP2
B13 HDIN
B3 SCL
A4 SDA2
A7 HP1
A9 EX PARA
B5 VFB
TO D BOARD CN6600
IC6102
ACTIVE HORIZONTAL SIZE ADJUSTMENT CONTROL
IC6100
HORIZONTAL DRIVE PULSE GENERATOR
IC6101
HORIZONTAL DRIVE PULSE GENERATOR
SWITCH Q6104 Q6106
SWITCH Q6104 Q6106
IC6250
MAIN HDY & VDY CONVERGANCE CONTROLLER
HD
SCL
SDA
VSTST
HSTAT
REFVOUT
HDYCON
VSAW
IC6251
O/P DRIVE STAGE FOR DYNAMIC CONVERGNCE
CY AMP Q6253, 6254
CN6622
CY-
CY+
CN6601 (2/2)
HD2OUT A23
HD1OUT A22
IN PIN B25
L IN A25
VM MOD B16
DF DRIVE A14
V PROT B15
TO D BOARD CN6600
IC6103
HORIZONTAL LINEARITY & INNER PIN CONTROL
IC6350
QP SIGNAL SHAPING
V PROT Q6403, Q6404 Q6402, Q6401
+12V
IC6351
QP SIGNAL SHAPING
IC6352
QP OUTPUT DRIVE STAGE
QP OUT Q6358
CN6502
QP-
TO VM BOARD CN6502
IC6356
ROTATION POWER AMPLIFIER
CN6633
TO ROTATION COIL
+5V
IC6355
ROTATION PRE-AMPLIFIER
IC6354
`H' TRAP MULTIPLEXER/SIGNAL CONDITIONER & `H' LIN
P4
P7
P5
P2
P6
IC6302
D/A FOR FOCUS, ROTATION, `H' TRAP
D1 (DEFLECTION)


CN2100
TO A BOARD CN1200
B1 VP100
A1 HP100
A16 Y MAIN IN
A17 U MAIN IN
A18 V MAIN IN
A2 Y 100
A3 U 100
A4 V 100
A6 RESET 100
SWITCH Q3300
A5 VM-OUT/MUTE
A20 H-PULSE MAIN IN
A19 V-PULSE MAIN IN
IC3301
HRD
PFD-INH
LLD
IC3302
VDEF
HDEF
Y7IN
Y6IN
Y5IN
Y4IN
Y3IN
Y2IN
Y1IN
Y0IN
U1IN
U0IN
V1IN
V0IN
Y50IN
U50IN
V50IN
Y-OUT
U-OUT
V-OUT
UP-RST
BLND
HA
HRD
P1.1
LLD
VP50
V0OUT
V1OUT
U0OUT
U1OUT
Y0OUT
Y1OUT
Y2OUT
Y3OUT
Y4OUT
Y5OUT
Y6OUT
Y7OUT
WE
SWCK
RSTW
RE
JE2
IC3303
V0IN
V1IN
U0IN
U1IN
Y0IN
Y1IN
Y2IN
Y3IN
Y4IN
Y5IN
Y6IN
Y7IN
WEIN
VPULSE
V0OUT
V1OUT
U0OUT
U1OUT
Y0OUT
Y1OUT
Y2OUT
Y3OUT
Y4OUT
Y5OUT
Y6OUT
Y7OUT
IC3304
RSTR
VIN0
VIN1
UIN0
UIN1
YIN0
YIN1
YIN2
YIN3
YIN4
YIN5
YIN6
YIN7
WE
SWCK
RSTN
RE
IE
OE
SRCK
YOUT7
YOUT6
YOUT5
YOUT4
YOUT3
YOUT2
YOUT1
YOUT0
UOUT1
UOUT0
VOUT1
VOUT0
B2 (100 MHz)

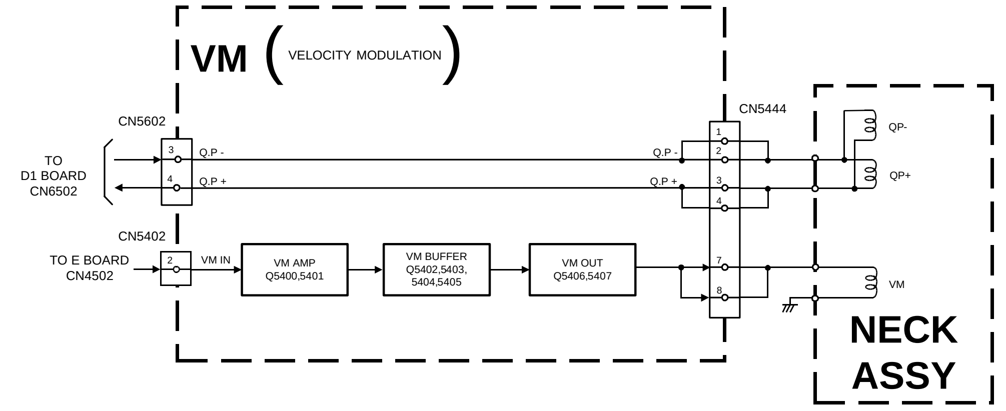
5-1. BLOCK DIAGRAMS (4)



IC9105
MAIN MICRO-CONTROLLER
CN9101
TO A BOARD
CN1901
SCLO
DISABLE
SDAO
SWITCH
Q9108,9109
SWITCH
Q9110
SWITCH
Q9106,9107
SCLO
SCL1
SDA1
SDA0
CS/DISABLE
IC9108
SDA
SCL
WP
X9101
16MHZ
XTAL1
XTAL2
IC9100
KEY PAD DRIVER
KEY2
KEY1
+2
+1
OUT2
OUT1
TC INT
AGC MONITOR
AGC MON
RESP. LED
SWITCH
Q9105
RESP LED
PIN8
SIRCS
ST BY
ST.BY
PROT
AC ON/OFF
AC ON.OFF
IC9104
RST IN
RESET
PULSE
ENABLE
WDT CLK
WDT EN
MID BUSY
AV LINK
SWITCH
Q9100
AVLINK OUT
AV LINK IN
IC9110
MASTER RESET I.C.
RES. AUDIO
RESET 100
RES. PICTURE
TC LED
AUDIO MUTE
EO
CLOCK
DATA
/STR
MTX RES
DSD OFF
/RST OUT
VP 100
HP 100
M3LEN
MRST
MTSR
SCLK
IC9500
TEXT BLANKING GENERATOR
TXT CLK
TXT BLK
SWITCH
Q9504,9503
VIDEO
TCS
TXT B
TXT G
TXT R
AMPLIFIER
Q9500,9501,
9502
IC9502
MEGATEXT I.C.
RES
VS
HS
CLK
BLAN
CVBS
TCS
GPO
B
G
R
XIN
XOUT
X9500
20.480MHZ
IC9109
PROGRAMMABLE O.T.P.
CS0
CS2
/RD
/WR
IC9107
R.A.M.
IC9400
M1 (MICRO TEXT)

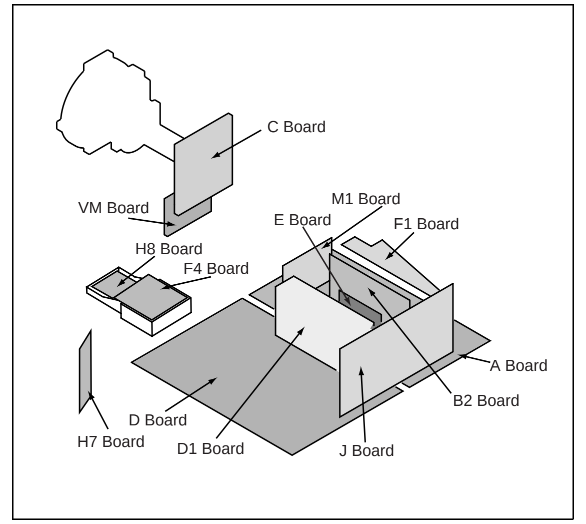


CN4101
TO A BOARD
CN1401
EXTRA PARABOLA
D FOCUS
Y100
U100
V100
SWITCH (PORT 3)
YMID
UMID
VMID
HDEFL
VDEFL
SDA2
SDL2
RED
GREEN
BLUE
BLK
DPIC SW
HD
FB PULSE
EW
ABL
XRAY
EXTRA PARA
DF PARA
YIN
Ct1 IN
Cr1 IN
FS
Y2 IN
Ct2 IN
Cr2 IN
HS IN
VS IN
SDA
SDL
R2 IN
G2 IN
B2 IN
YS/YM2
DPIC DCTR
HD
HP IN
EW
ABL IN
ABL FIL
SCP
L2FJL
R OUT
G OUT
B OUT
IK IN
VM OUT
500K
X4300
503.5 kHz
CN4500
RED
GREEN
BLUE
IK
CN4502
TO VM BOARD
CN5402
IC4301
MULTI COMPONENT PROCESSOR
E (RGB OUT / CHROMA)
CN5400
R
G
B
IK
+12V
POWER ON SWITCH
Q5350
IC5300
VIDEO OUT (RED)
IC5325
VIDEO OUT (GREEN)
IC5350
VIDEO OUT (BLUE)
VB
VI
VDF
VO
IK
STANBY SW
Q5300
STANBY SW
Q5325
STANBY SW
Q5351
VOLTAGE DET
Q5375, 5376
FV
TO D BOARD
FV (T6804)
J5375
G4
G2
H1
PICTURE TUBE
HV
TO D BOARD
HV (T6804)
CN5600
RV5375
G2
TO D BOARD
CN6500
C (CRT DRIVE)



VM (VELOCITY MODULATION)
CN5602
TO
D1 BOARD
CN6502
Q.P -
Q.P +
CN5402
TO E BOARD
CN4502
VM IN
VM AMP
Q5400,5401
VM BUFFER
Q5402,5403,
5404,5405
VM OUT
Q5406,5407
CN5444
QP-
QP+
VM
NECK
ASSY

5-2. CIRCUIT BOARD LOCATION



C Board
VM Board
M1 Board
E Board
F1 Board
H8 Board
F4 Board
A Board
B2 Board
D Board
H7 Board
D1 Board
J Board

5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in μF unless otherwise noted.
- pF : μμF 50WV or less are not indicated except for electrolytic types.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5mm
Electrical power rating : 1/4W

- Chip resistors are 1/10W
- All resistors are in ohms.
  k = 1000 ohms, M = 1000,000 ohms
- : nonflammable resistor.
- : fusible resistor.
- △ : internal component.
- ▭ : panel designation or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in Volts.
- Readings are taken with a 10Mohm digital mutimeter.
- Readings are taken with a color bar input signal.
- Voltage variations may be noted due to normal production tolerences.
- ━ : B + bus.
- ╍ : B - bus.
- ➡ : RF signal path.
- ⊥ : earth - ground.
- ⏚ : earth - chassis.

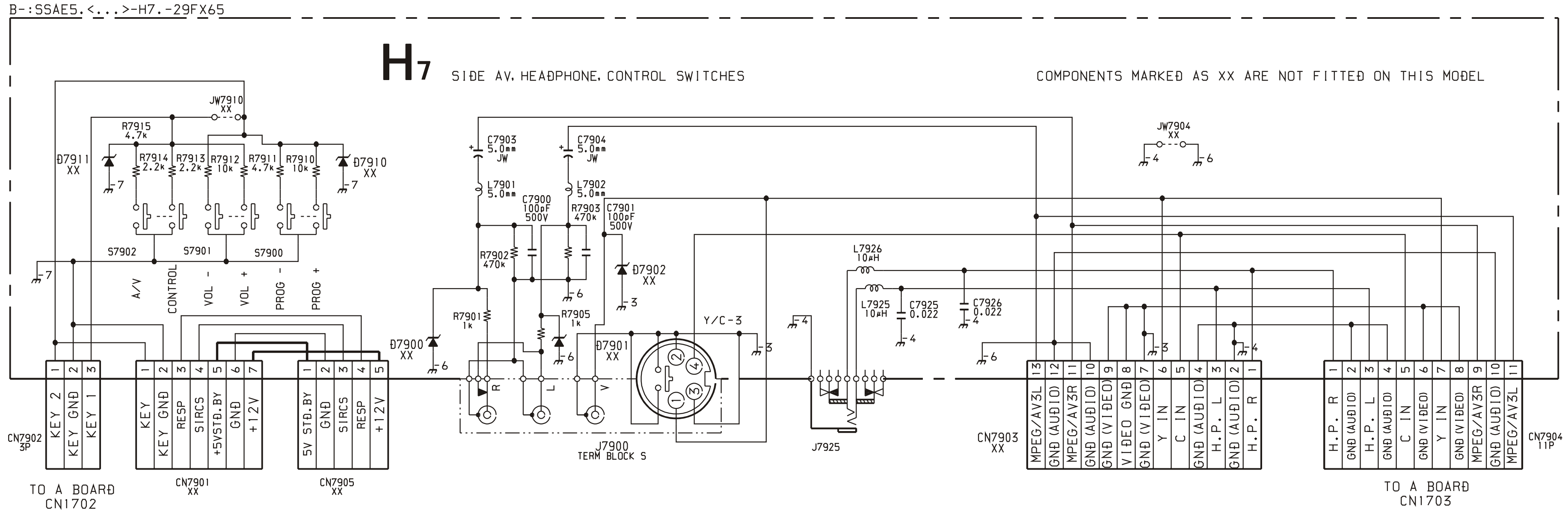
Reference Information

RESISTOR	**RN**	: METAL FILM
	RC	: SOLID
	FPRD	: NON FLAMMABLE CARBON
	FUSE	: NON FLAMMABLE FUSIBLE
	RS	: NON FLAMMABLE METAL OXIDE
	RB	: NON FLAMMABLE CEMENT
	RW	: NON FLAMMABLE WIREWOUND
	⊠	: ADJUSTMENT RESISTOR
COIL	**LF-8L**	: MICRO INDUCTOR
CAPACITOR	**TA**	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

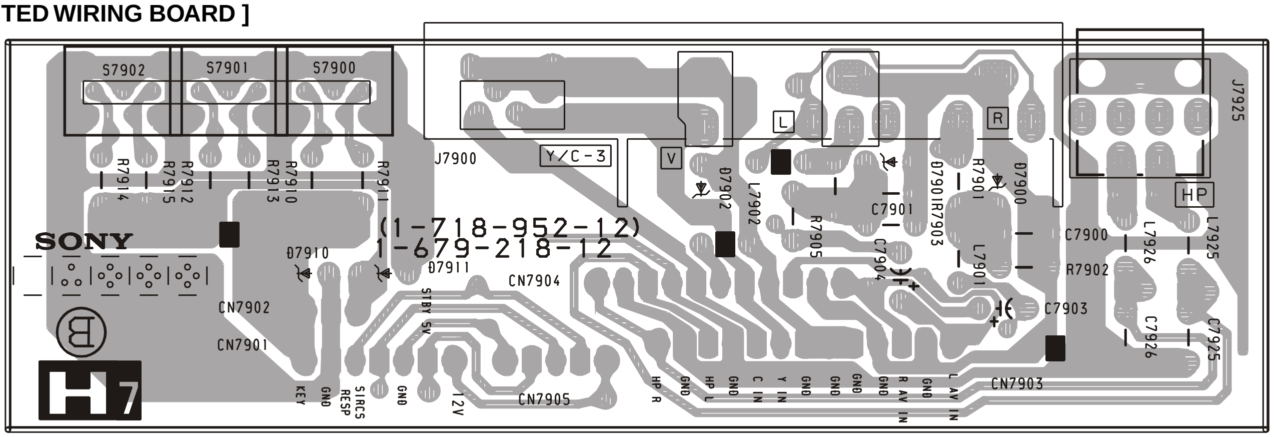
Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

Note : Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié. specified.

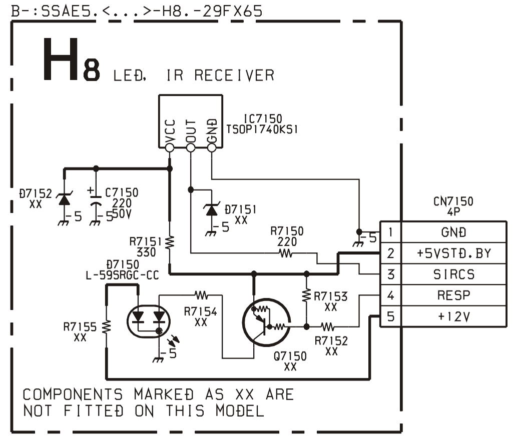
H7 [FRONT AV, S-VIDEO]


B-:SSAE5.<...>-H7.-29FX65
H7 SIDE AV, HEADPHONE, CONTROL SWITCHES
COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL
JW7910 XX
R7915 4.7k
D7911 XX
R7914 2.2k
R7913 2.2k
R7912 10k
R7911 4.7k
R7910 10k
D7910 XX
S7902
S7901
S7900
A/V
CONTROL
VOL -
VOL +
PROG -
PROG +
C7903 5.0mm JW
C7904 5.0mm JW
L7901 5.0mm
L7902 5.0mm
C7900 100pF 500V
R7903 470k
C7901 100pF 500V
R7902 470k
D7902 XX
R7901 1k
R7905 1k
D7900 XX
D7901 XX
Y/C-3
L7926 10uH
L7925 10uH
C7925 0.022
C7926 0.022
JW7904 XX
KEY 2
KEY GND
KEY 1
CN7902 3P
TO A BOARD CN1702
KEY
KEY GND
RESP
SIRCS
+5VSTD.BY
GND
+12V
CN7901 XX
5V STD.BY
GND
SIRCS
RESP
+12V
CN7905 XX
J7900 TERM BLOCK S
J7925
CN7903 XX
MPEG/AV3L
GND (AUDIO)
MPEG/AV3R
GND (AUDIO)
GND (VIDEO)
VIDEO GND
GND (VIDEO)
Y IN
C IN
GND (AUDIO)
H.P. L
GND (AUDIO)
H.P. R
CN7904 11P
TO A BOARD CN1703

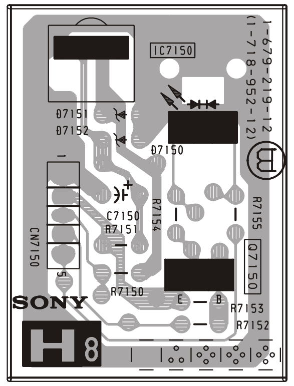
H7 [PRINTED WIRING BOARD]


S7902
S7901
S7900
R7914
R7912
R7915
R7913
R7910
R7911
J7900
Y/C-3
V
L
R
D7902
L7902
C7901
R7905
C7904
D7901
R7903
R7901
D7900
L7901
HP
C7900
R7902
C7903
L7926
L7925
C7926
C7925
J7925
SONY
(1-718-952-12)
1-679-218-12
D7910
D7911
CN7904
CN7902
CN7901
STBY 5V
KEY
GND
SIRCS
RESP
GND
12V
CN7905
HP R
GND
HP L
C IN
Y IN
GND
GND
GND
R AV IN
GND
L AV IN
CN7903
H7

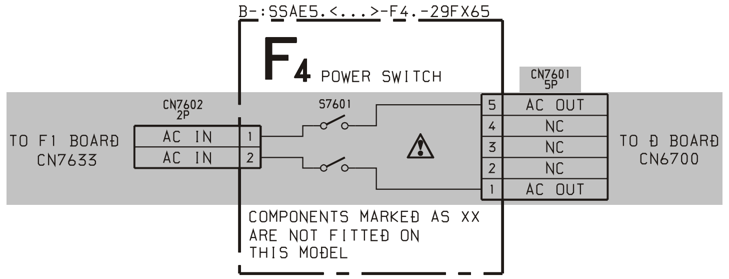
H8 [IR RECEIVER FOR SIRCS AND LED]


B-:SSAE5.<...>-H8.-29FX65
H8 LED, IR RECEIVER
VCC
OUT
GND
IC7150 TSOP1740KS1
D7152 XX
C7150 220 50V
D7151 XX
R7150 220
R7151 330
D7150 L-595RGC-CC
R7154 XX
R7153 XX
R7152 XX
R7155 XX
Q7150 XX
CN7150 4P
GND
+5VSTD.BY
SIRCS
RESP
+12V
TO A BOARD CN1700
COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL

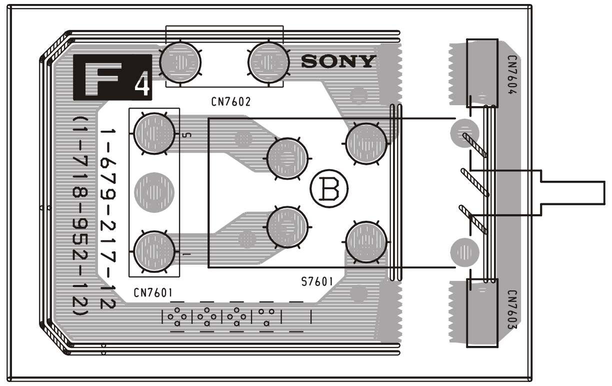
H8 [PRINTED WIRING BOARD]


IC7150
1-679-219-12
(1-718-952-12)
D7151
D7152
D7150
C7150
R7151
R7154
R7155
Q7150
R7150
R7153
R7152
CN7150
SONY
H8

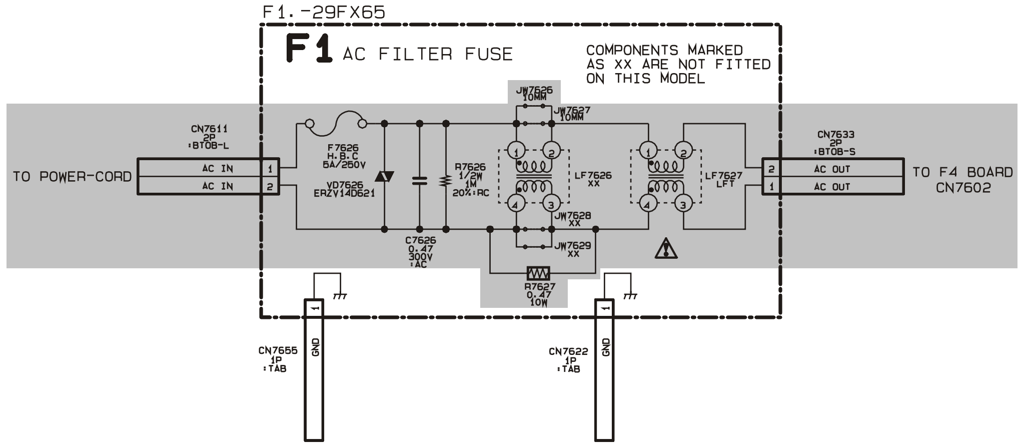
F4 [POWER SWITCH]


B-:SSAE5.<...>-F4.-29FX65
F4 POWER SWITCH
CN7602 2P
AC IN
AC IN
TO F1 BOARD CN7633
S7601
CN7601 5P
AC OUT
NC
NC
NC
AC OUT
TO D BOARD CN6700
COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL

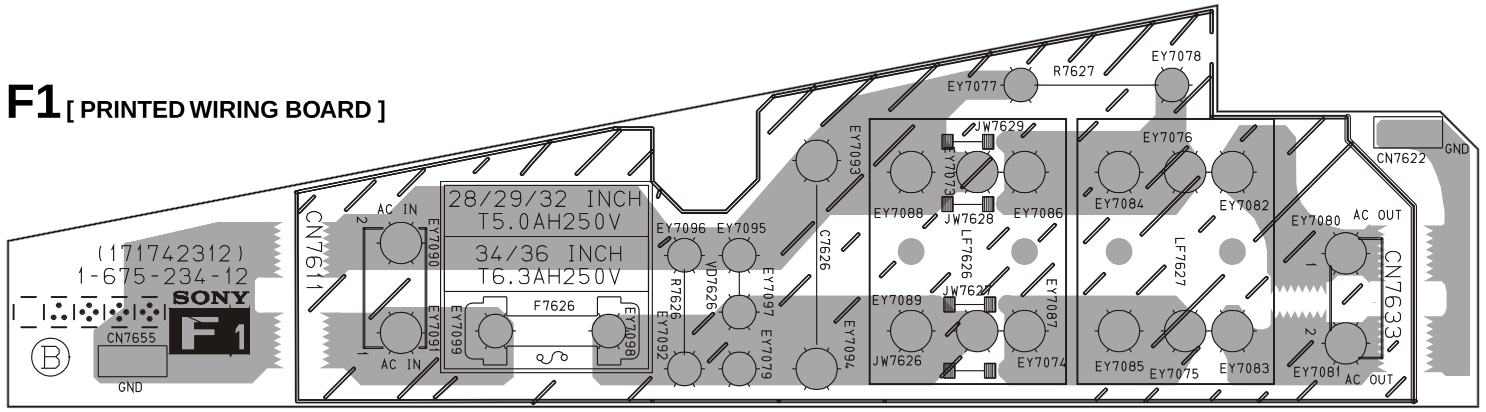
F4 [PRINTED WIRING BOARD]

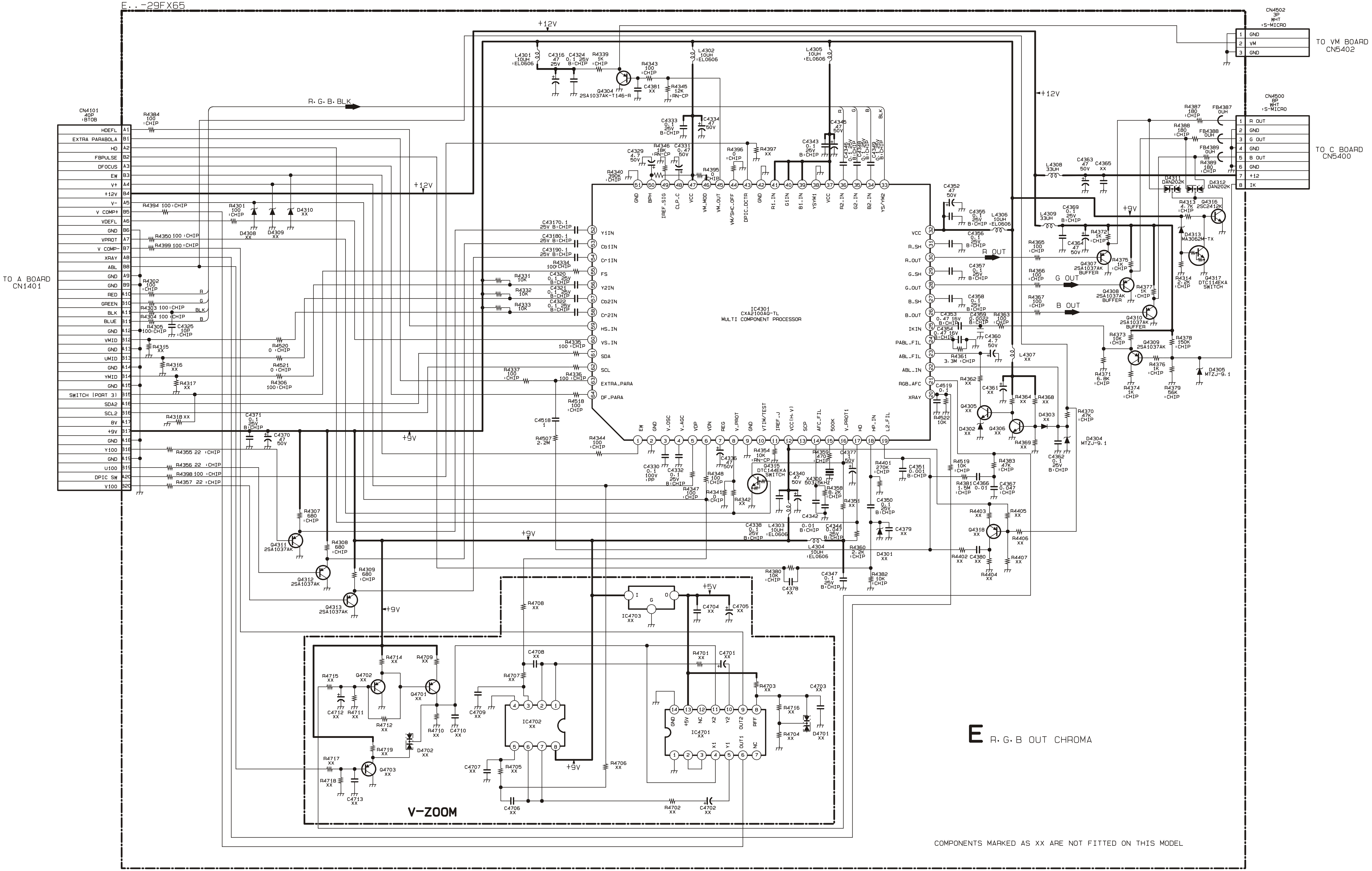

F4
SONY
CN7602
1-679-217-12
(1-718-952-12)
S7601
CN7601
CN7604
CN7605

F1 [AC FILTER FUSE]


F1.-29FX65
F1 AC FILTER FUSE
COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL
CN7611 2P +BTOB-L
AC IN
AC IN
TO POWER-CORD
F7626 H.B.C 5A/250V
VD7626 ERZV14D621
JW7625 10mm
JW7627 10mm
R7626 1/2W 1M 20% RC
LF7626 XX
LF7627 LFT
JW7628 XX
JW7629 XX
C7626 0.47 300V AC
R7627 0.47 10W
CN7633 2P +BTOB-S
AC OUT
AC OUT
TO F4 BOARD CN7602
CN7655 1P +TAB
CN7622 1P +TAB
GND

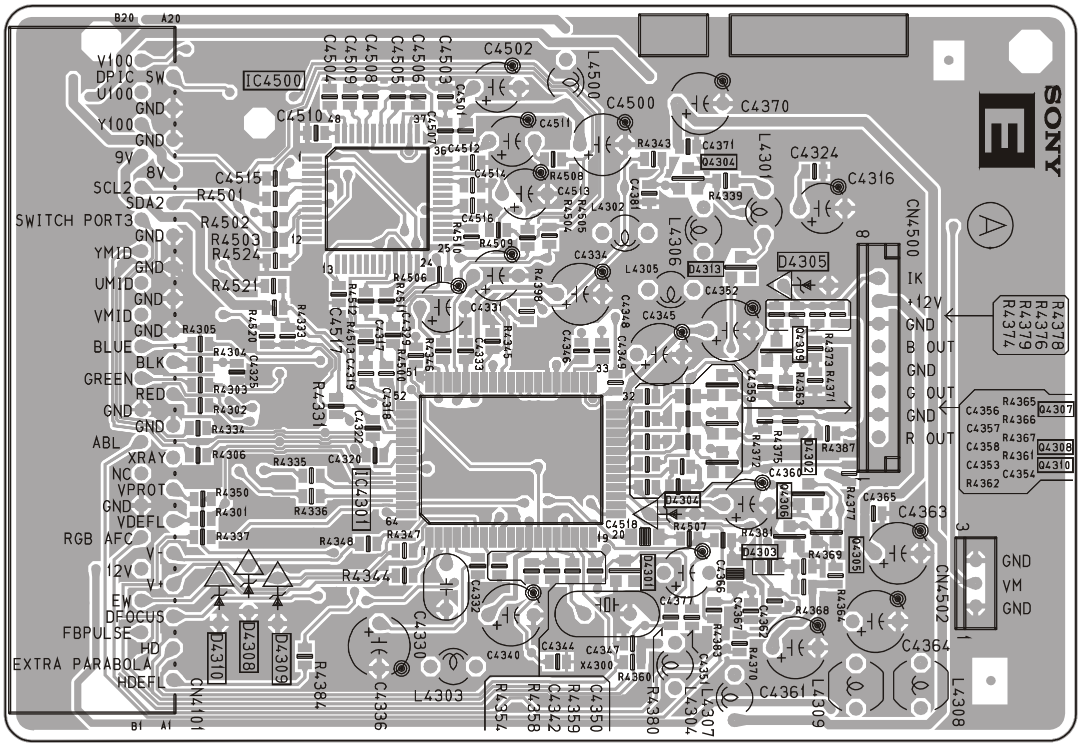
F1 [PRINTED WIRING BOARD]


(171742312)
1-675-234-12
SONY
F1
CN7655
GND
CN7611
AC IN
AC IN
28/29/32 INCH T5.0AH250V
34/36 INCH T6.3AH250V
F7626
EY7090
EY7091
EY7098
EY7099
EY7096
EY7095
R7626
VD7626
EY7092
C7626
EY7097
EY7079
EY7093
EY7094
EY7088
EY7089
JW7629
EY7073
JW7628
LF7626
JW7627
JW7626
EY7086
EY7087
EY7074
EY7077
R7627
EY7078
EY7076
EY7084
EY7082
LF7627
EY7085
EY7075
EY7083
EY7080
EY7081
CN7622
GND
AC OUT
AC OUT
CN7633

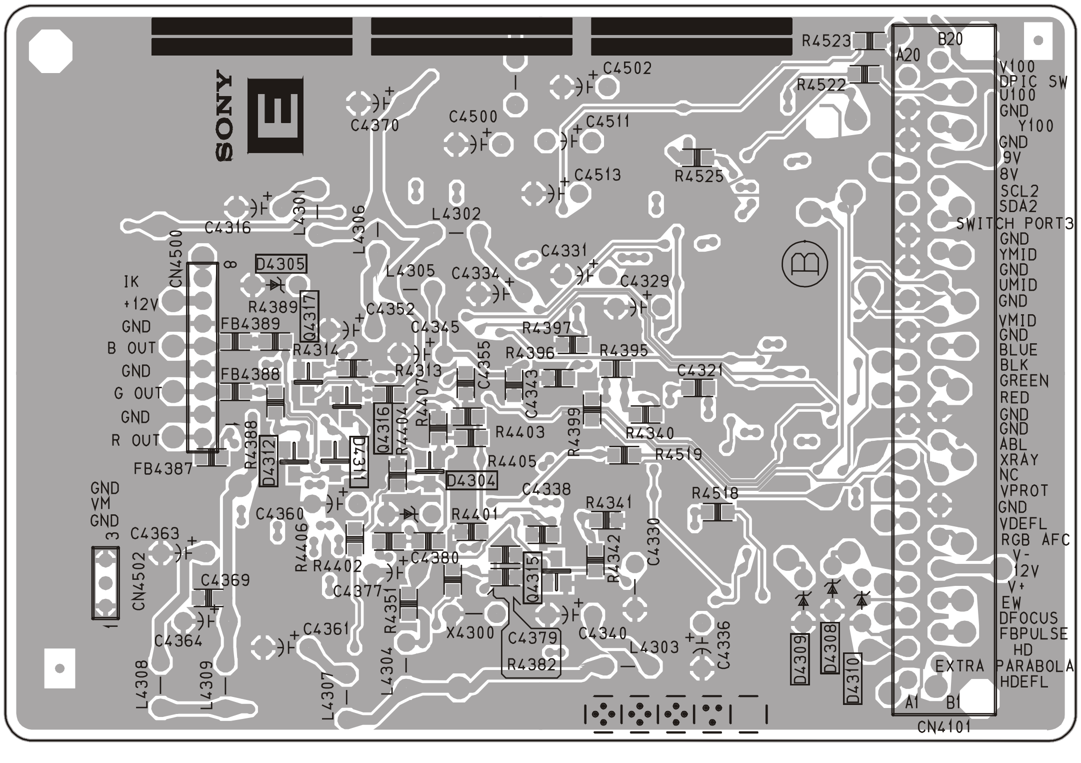

E..-29FX65
CN4101 40P BTOB
TO A BOARD CN1401
HDEFL
EXTRA PARABOLA
HD
FBPULSE
DFOCUS
EW
V+
+12V
V-
V COMP+
VDEFL
GND
VPROT
V COMP-
XRAY
ABL
RED
GREEN
BLK
BLUE
VMID
UMID
YMID
SWITCH (PORT 3)
SDA2
SCL2
8V
+9V
Y100
U100
DPIC SW
V100
R.G.B.BLK
+12V
+9V
IC4301 CXA2100AQ-TL MULTI COMPONENT PROCESSOR
R OUT
G OUT
B OUT
CN4502 3P WHT S-MICRO
TO VM BOARD CN5402
CN4500 8P WHT S-MICRO
TO C BOARD CN5400
Q4304 2SA1037AK-T146-R
Q4307 2SA1037AK BUFFER
Q4308 2SA1037AK BUFFER
Q4310 2SA1037AK BUFFER
Q4309 2SA1037AK
Q4316 2SC2412K
Q4317 DTC114EKA SWITCH
Q4315 DTC144EKA SWITCH
Q4311 2SA1037AK
Q4312 2SA1037AK
Q4313 2SA1037AK
IC4703
IC4702
IC4701
+5V
V-ZOOM
E R,G,B OUT CHROMA
COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL

E **[R, G, B OUT CHROMA]**

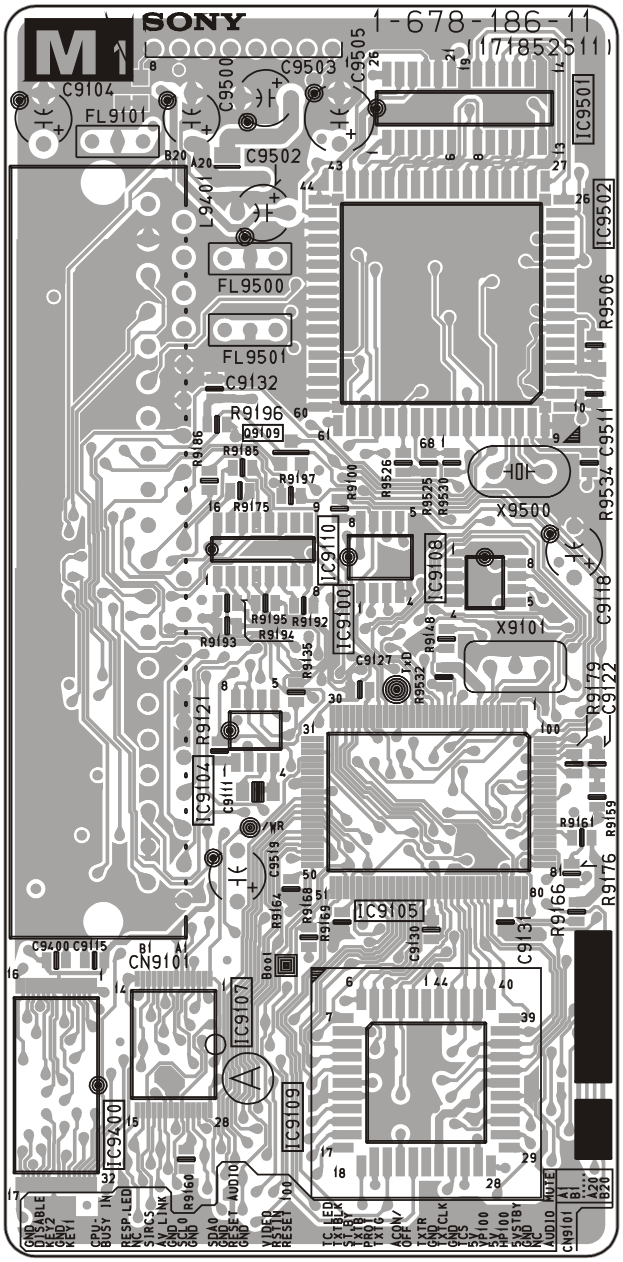
E [PRINTED WIRING BOARD (A side)]


B20
A20
V100
DPIC SW
U100
GND
Y100
GND
9V
8V
SCL2
SDA2
SWITCH PORT3
GND
YMID
GND
UMID
GND
VMID
GND
BLUE
BLK
GREEN
RED
GND
GND
ABL
XRAY
NC
VPROT
GND
VDEFL
RGB AFC
V-
12V
V+
EW
DFOCUS
FBPULSE
HD
EXTRA PARABOLA
HDEFL
B1
A1
CN4101
IC4500
C4504
C4509
C4508
C4505
C4506
C4503
C4502
L4500
C4500
C4370
C4510
C4511
C4515
R4501
R4502
R4503
R4524
R4521
C4324
C4316
L4301
CN4500
IK
+12V
GND
B OUT
GND
G OUT
GND
R OUT
R4378
R4376
R4379
R4374
C4356
C4357
C4358
C4353
R4362
R4365
R4366
R4367
R4361
C4354
Q4307
Q4308
Q4310
D4305
D4313
L4306
L4305
C4334
C4352
C4345
R4305
R4304
R4303
R4302
R4334
R4306
R4350
R4301
R4337
R4335
R4336
R4348
R4331
C4320
C4322
IC4301
C4511
R4344
R4347
D4310
D4308
D4309
R4384
C4336
C4330
L4303
C4332
C4340
C4344
C4347
X4300
R4354
R4358
R4359
C4342
C4350
R4360
R4380
L4307
L4304
C4361
L4309
L4308
C4364
CN4502
GND
VM
GND
C4363
C4365
D4305
D4304
D4302
D4303
D4301
C4360
C4366
C4367
C4362
C4377
R4368
R4369
R4381
R4387
R4377
R4507
C4518
R4343
C4371
Q4304
R4339
L4302
R4508
C4513
C4516
C4514
C4512
R4509
R4506
C4331
C4329
C4333
C4317
C4318
C4319
C4325
C4346
C4348
C4349
R4345
R4346
R4398
SONY
E
A

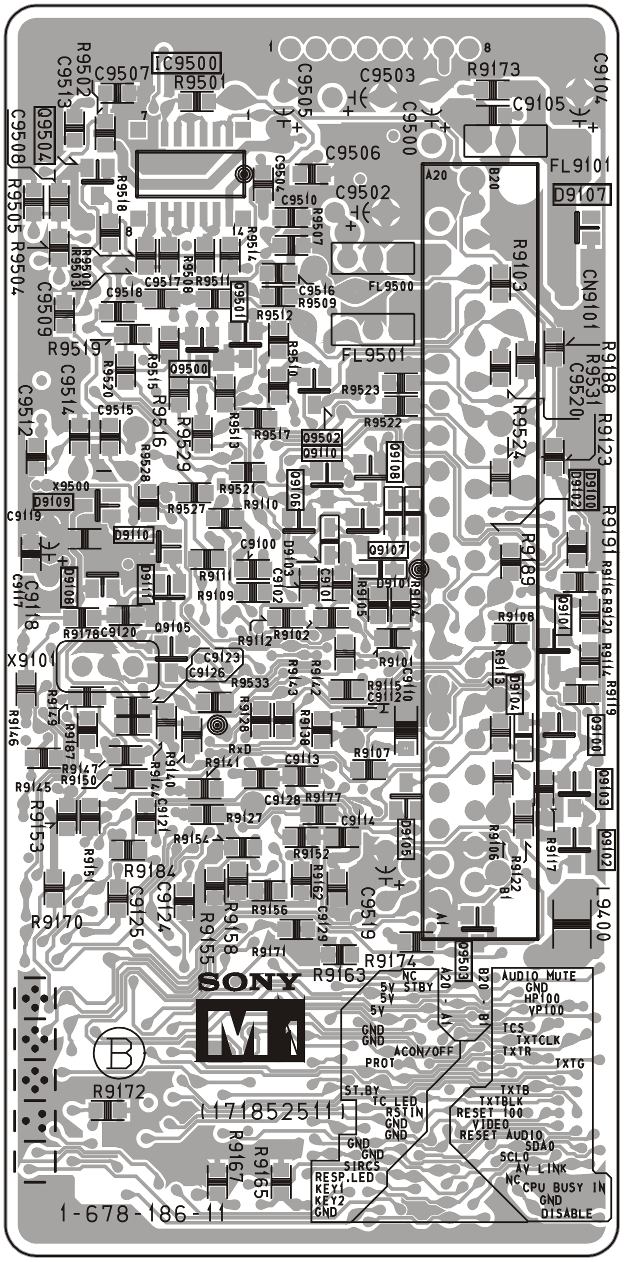
E [PRINTED WIRING BOARD (B side)]

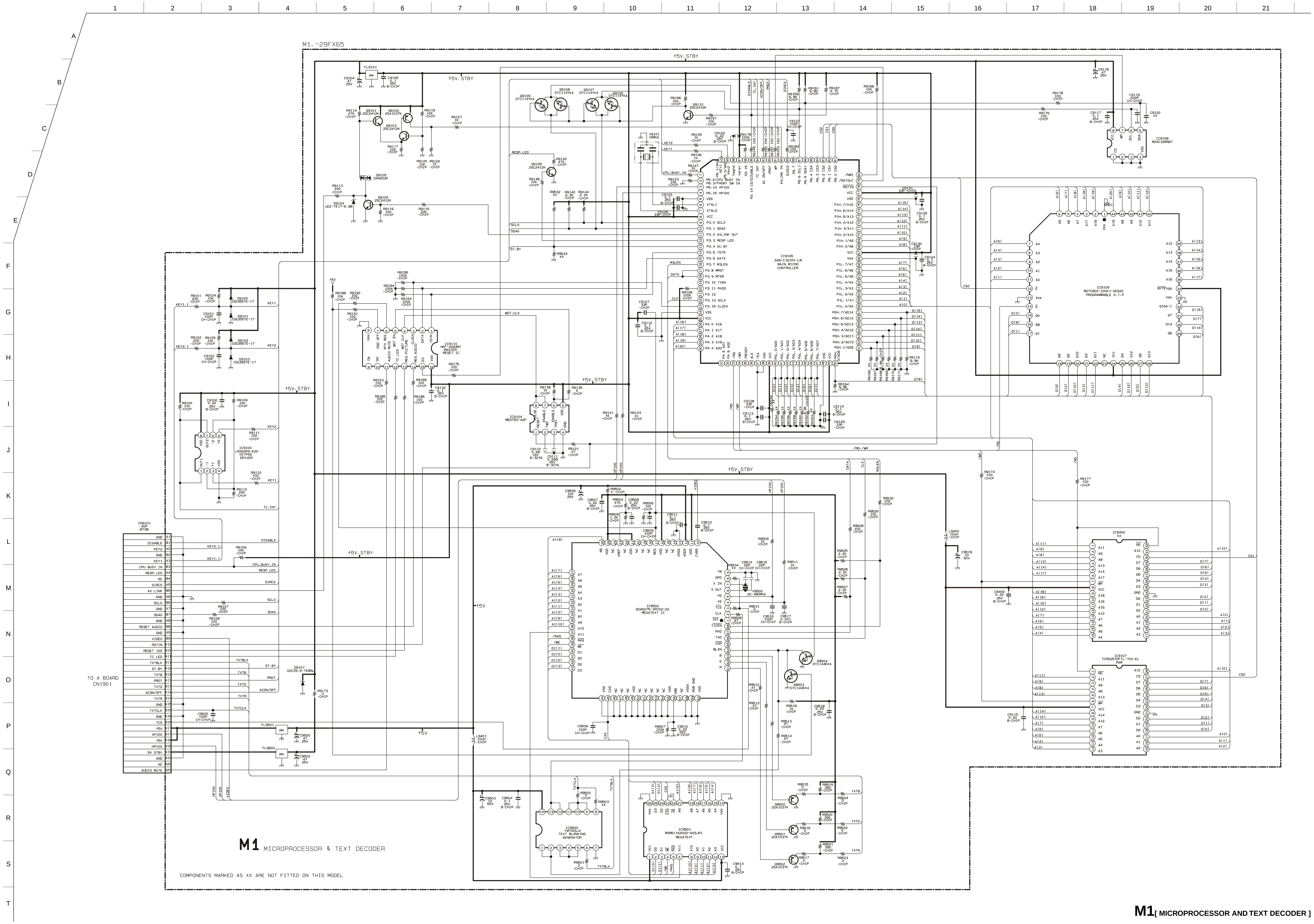

SONY
E
R4523
R4522
B20
A20
C4502
C4370
C4500
C4511
C4513
R4525
C4316
L4301
L4306
L4302
CN4500
D4305
IK
+12V
GND
B OUT
GND
G OUT
GND
R OUT
R4389
FB4389
Q4317
FB4388
FB4387
R4314
R4388
D4312
D4311
Q4316
L4305
C4334
C4352
C4345
C4331
C4329
R4397
R4396
R4395
C4321
R4313
C4355
C4343
R4407
R4404
R4403
R4399
R4340
R4519
R4405
D4304
C4338
R4518
R4341
R4401
R4342
C4330
C4360
R4406
R4402
C4380
C4377
R4351
Q4315
C4379
R4382
X4300
C4340
L4303
C4336
C4361
C4363
C4369
C4364
CN4502
GND
VM
GND
L4308
L4309
L4307
L4304
D4309
D4308
D4310
B
V100
DPIC SW
U100
GND
Y100
GND
9V
8V
SCL2
SDA2
SWITCH PORT3
GND
YMID
GND
UMID
GND
VMID
GND
BLUE
BLK
GREEN
RED
GND
GND
ABL
XRAY
NC
VPROT
GND
VDEFL
RGB AFC
V-
12V
V+
EW
DFOCUS
FBPULSE
HD
EXTRA PARABOLA
HDEFL
A1
B1
CN4101

M1 [PRINTED WIRING BOARD (A side)]


M1
SONY
1-678-186-11
(1718525 11)
C9104
FL9101
C9500
C9503
C9505
IC9501
C9502
L9401
FL9500
FL9501
IC9502
R9506
C9132
R9196
D9109
R9186
R9185
R9197
R9175
R9100
R9526
R9525
R9530
X9500
C9511
R9534
IC9110
IC9108
IC9100
C9118
R9195
R9192
R9194
R9193
R9135
X9101
R9148
TxD
R9532
C9127
R9121
R9179
C9122
IC9104
C9111
/WR
C9519
R9164
R9168
R9169
IC9105
R9161
R9159
R9176
R9166
C9131
C9130
C9400
C9115
CN9101
IC9107
IC9109
IC9400
R9160
Boot
A
GND
DISABLE
KEY2
GND
KEY1
CPU-BUSY IN
RESP.LED
NC
SIRCS
AV LINK
GND
SCLO
GND
SDAO
GND
RESET AUDIO
GND
VIDEO
RSTIN
RESET 100
TC LED
TXTBLK
ST.BY
TXTB
PROT
TXTG
ACON/OFF
TXTR
GND
TXTCLK
GND
TCS
5V
VP100
5V
HP100
5VSTBY
GND
NC
AUDIO MUTE
CN9101
A1
B1
A20
B20

M1 [PRINTED WIRING BOARD (B side)]

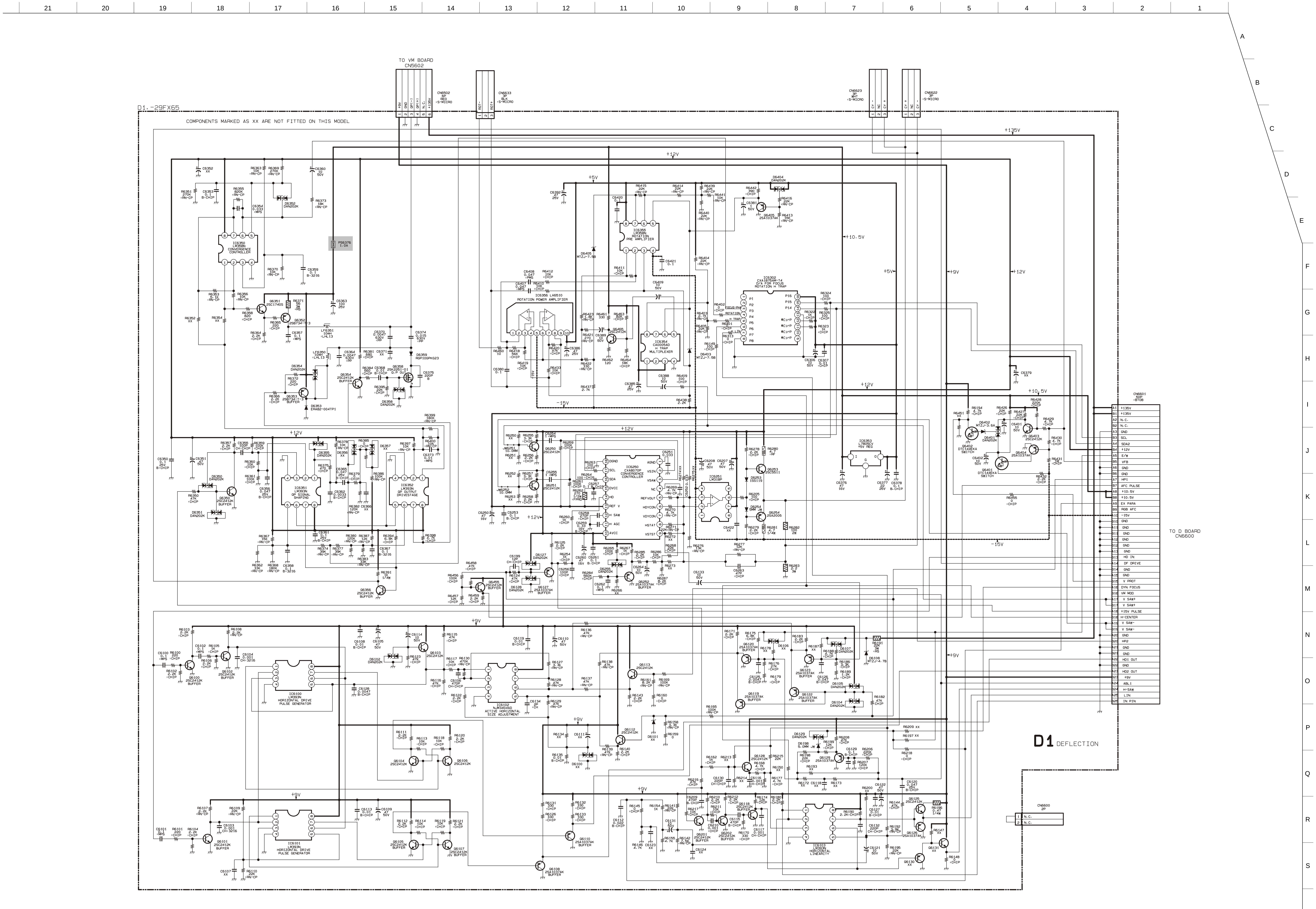

IC9500
R9501
C9507
R9502
C9513
C9505
C9503
R9173
C9104
C9105
C9500
C9506
C9508
D9504
R9505
R9504
C9502
FL9101
D9107
C9509
C9510
R9507
C9504
R9518
R9514
R9103
CN9101
FL9500
C9518
C9517
C9516
R9509
R9512
D9501
R9519
FL9501
R9188
R9531
C9520
C9514
C9512
D9500
R9516
R9529
R9523
R9522
R9524
R9123
C9515
R9517
D9502
D9110
D9108
X9500
D9109
R9521
R9527
R9110
D9106
C9119
D9110
C9100
D9107
D9101
R9191
R9189
C9118
C9117
D9108
R9111
R9109
C9102
C9101
R9105
R9104
R9108
R9116
R9120
R9114
R9119
R9178
C9120
Q9105
R9112
R9102
X9101
C9123
C9126
R9533
R9101
C9110
R9115
C9112
D9104
D9100
R9146
R9187
R9128
R9138
R9107
RxD
R9141
C9113
D9103
R9145
R9147
R9150
R9140
R9153
C9128
R9177
C9114
D9105
R9154
R9127
R9106
R9122
R9117
D9102
R9184
R9151
R9152
C9129
C9519
L9400
R9170
C9125
C9124
R9158
R9155
R9156
R9171
R9163
R9174
D9503
SONY
M1
B
R9172
(1718525 11)
R9167
R9165
1-678-186-11
NC
5V STBY
5V
5V
GND
GND
ACON/OFF
PROT
ST.BY
TC LED
RSTIN
GND
GND
GND
GND
SIRCS
RESP.LED
KEY1
KEY2
GND
AUDIO MUTE
GND
HP100
VP100
TCS
TXTCLK
TXTR
TXTG
TXTB
TXTBLK
RESET 100
VIDEO
RESET AUDIO
SDAO
SCLO
AV LINK
NC
CPU BUSY IN
GND
DISABLE


M1.-29FX65
+5V.STBY
+5V
IC9105 SAB-C161RI-LM MAIN MICRO CONTROLLER
IC9109 M27C800-100X1-AE520 PROGRAMMABLE O.T.P
IC9108 M24C32MN6T
IC9110 HEF-4094BT MASTER RESET IC
IC9104 MB3793-42P
IC9100 LM393PS-E20 KEYPAD DRIVER
IC9502 SDA5275-3PC02-22 MEGATEXT IC
IC9400 xx
IC9107 TC55257DFTL-70V-EL RAM
IC9500 74F00SJX TEXT BLANKING GENERATOR
IC9501 MSM5116400D-60SJR1 MEGATEXT
X9101 16MHz
X9500 20.480MHz
CN9101 40P BTOB
TO A BOARD CN1901
GND
DISABLE
KEY2
GND
KEY1
CPU BUSY IN
RESP.LED
NC
SIRCS
AV LINK
GND
SCL0
GND
SDA0
GND
RESET AUDIO
GND
VIDEO
RSTIN
RESET 100
TC LED
TXTBLK
ST.BY
TXTB
PROT
TXTG
ACON/OFF
TXTR
GND
TXTCLK
GND
TCS
+5V
VP100
+5V
HP100
5V STBY
GND
NC
AUDIO MUTE
Q9500 2SA1037K
Q9501 2SA1037K
Q9502 2SA1037K
Q9503 DTC144EKA
Q9504 DTC144EKA
D9107 02CZ5.6-TE85L
FL9101
FL9500
FL9501
L9400 10UH
LS401 10UH

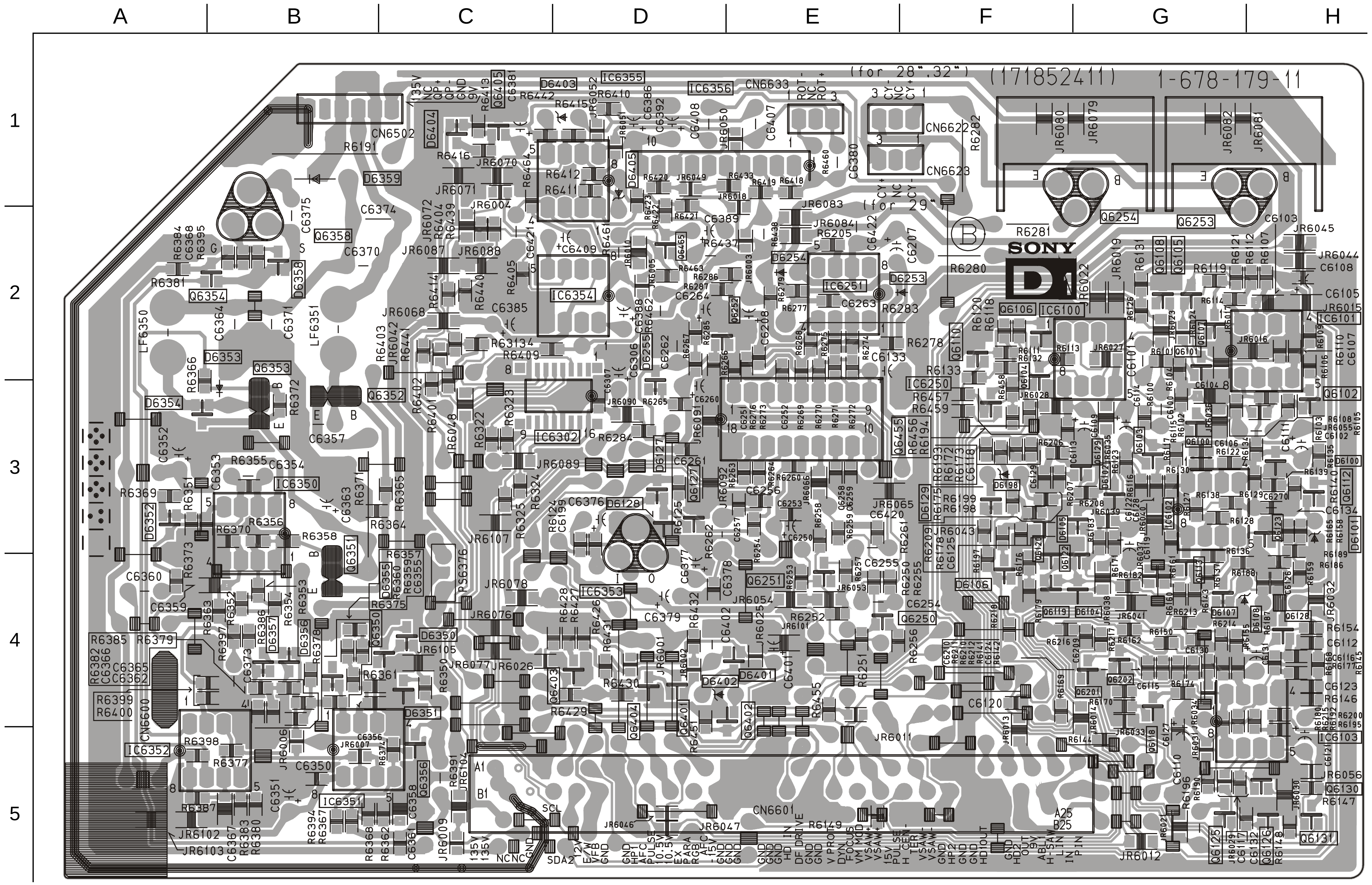
M1 MICROPROCESSOR & TEXT DECODER

COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL

M1[MICROPROCESSOR AND TEXT DECODER]

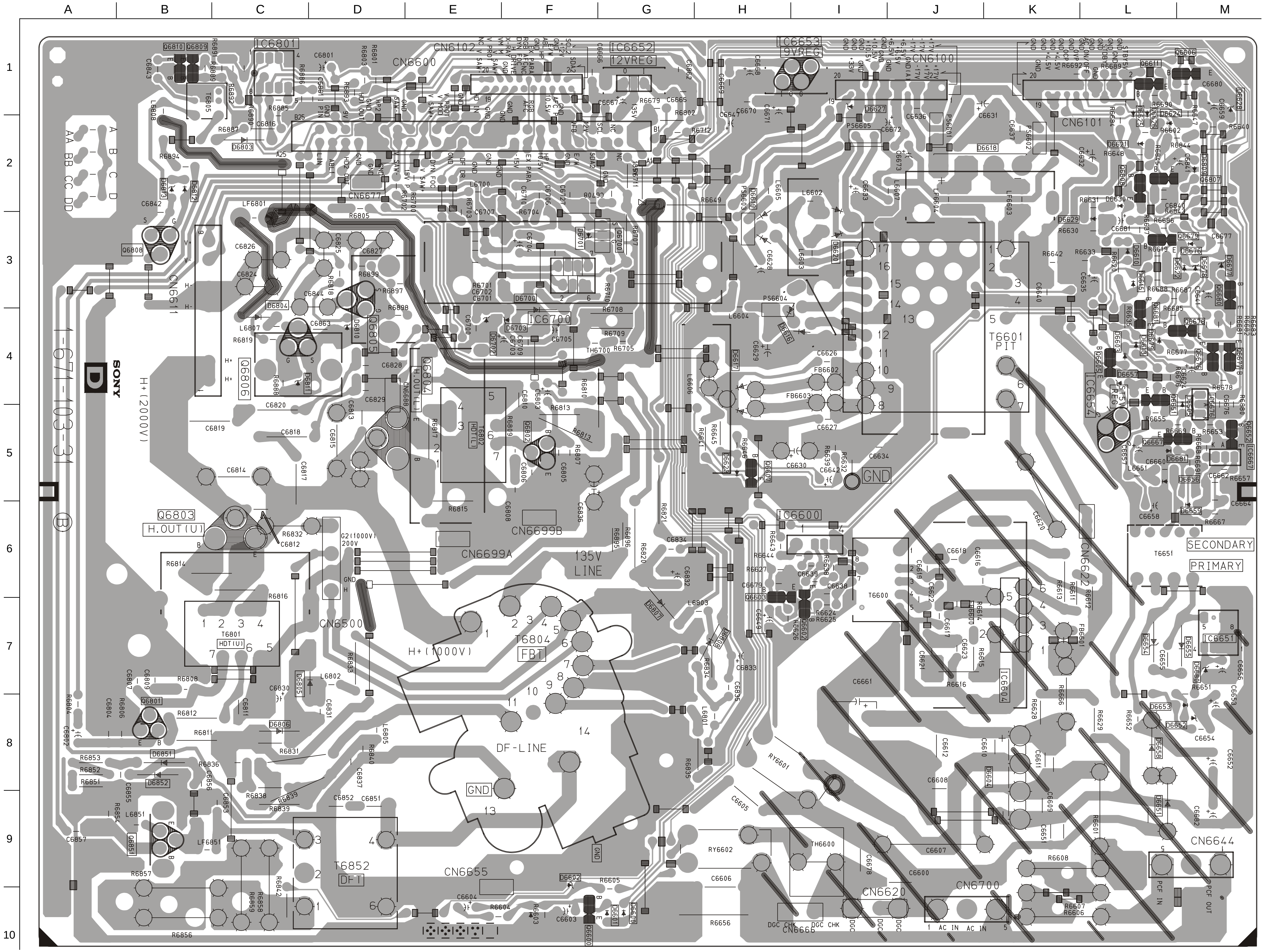

D1.-29FX65
COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL
TO VM BOARD CN5602
CN6502 6P RED S-MICRO
CN6633 3P BLK S-MICRO
CN6623 3P WHT S-MICRO
CN6622 3P S-MICRO
+135V
+12V
+5V
+10.5V
+9V
-15V
+10.5V
IC6350 LM358N CONVERGENCE CONTROLLER
IC6355 LM358N ROTATION PRE AMPLIFIER
IC6356 LA6510 ROTATION POWER AMPLIFIER
IC6354 CA0004D H TRAP MULTIPLEXER
IC6302 CXA1875AM-T4 D/A FOR FOCUS ROTATION H TRAP
IC6351 LM393N GP SIGNAL SHAPING
IC6352 LM393N GP OUTPUT DRIVESTAGE
IC6250 CXA8070P CONVERGENCE CONTROLLER
IC6251 LM318P
IC6353 L7805CV +5V REG
IC6100 LM393N HORIZONTAL DRIVE PULSE GENERATOR
IC6101 LM393N HORIZONTAL DRIVE PULSE GENERATOR
IC6102 NJM3404AL ACTIVE HORIZONTAL SIZE ADJUSTMENT
IC6103 LM393N HORIZONTAL LINEARITY
CN6601 50P BTOB
TO D BOARD CN5600
CN5600 2P
D1 DEFLECTION

D1[DEFLECTION]

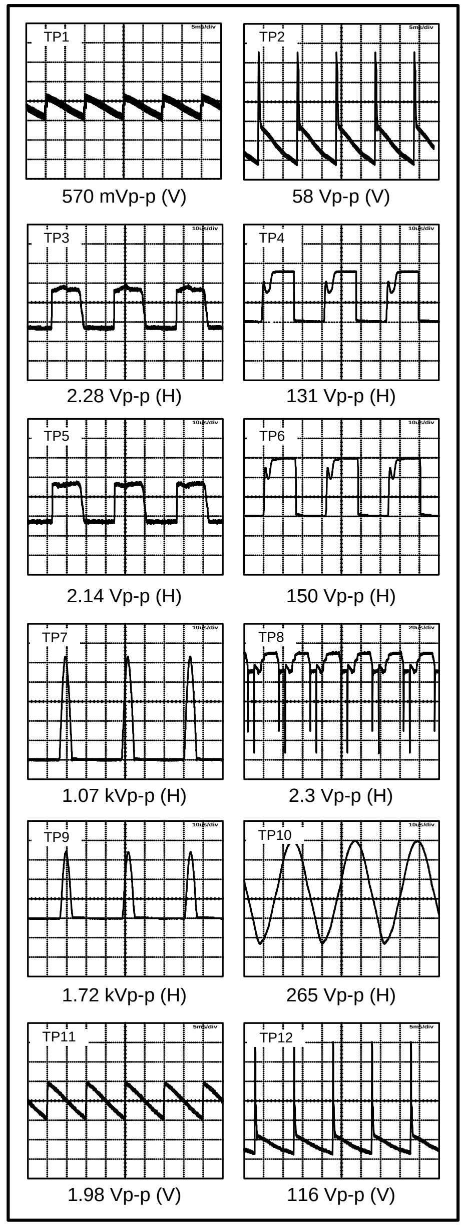

A
B
C
D
E
F
G
H
1
2
3
4
5
(for 28",32")
(171852411)
1-678-179-11
SONY
D1
CN6502
CN6633
CN6622
CN6623
CN6601
CN6600
IC6100
IC6101
IC6102
IC6103
IC6250
IC6251
IC6302
IC6350
IC6351
IC6352
IC6353
IC6354
IC6355
IC6356
JR6080
JR6079
JR6082
JR6081
A1
B1
A25
B25
SDA2
SCL

IC		IC6351	B - 5	Q6102	H - 3	Q6113	H - 4	Q6128	H - 4	Q6352	C - 3	Q6405	C - 1	D6127	D - 3	D6354	A - 3
IC6100	G - 2	IC6352	A - 5	Q6103	G - 3	Q6118	G - 5	Q6129	G - 3	Q6353	B - 3	Q6455	F - 3	D6128	D - 3	D6355	C - 4
IC6101	H - 2	IC6353	D - 4	Q6104	F - 3	Q6119	G - 4	Q6201	G - 4	Q6354	B - 2	Q6465	D - 2	D6129	F - 3	D6358	B - 2
IC6102	G - 3	IC6354	D - 2	Q6105	G - 2	Q6120	G - 4	Q6202	G - 4	Q6356	B - 5	**DIODE**		D6253	F - 2	D6359	C - 1
IC6103	H - 5	IC6355	D - 1	Q6106	F - 2	Q6122	G - 4	Q6250	F - 4	Q6358	B - 2	D6102	G - 3	D6255	D - 2	D6401	E - 4
IC6250	F - 3	IC6356	E - 1	Q6107	H - 2	Q6123	H - 3	Q6251	E - 4	Q6401	D - 5	D6104	G - 4	D6350	C - 4	D6402	E - 4
IC6251	D - 2	**TRANSISTOR**		Q6108	G - 2	Q6125	H - 5	Q6252	E - 2	Q6402	E - 5	D6105	G - 3	D6351	C - 5	D6403	D - 1
IC6302	D - 3	Q6100	G - 3	Q6110	F - 2	Q6126	H - 5	Q6350	C - 4	Q6403	D - 4	D6107	H - 4	D6352	A - 3	D6404	C - 1
IC6350	B - 3	Q6101	G - 2	Q6112	H - 3	Q6127	D - 3	Q6351	B - 5	Q6404	D - 5	D6108	H - 4	D6353	B - 2	D6405	D - 1

D1 [PRINTED WIRING BOARD]


A
B
C
D
E
F
G
H
I
J
K
L
M
1
2
3
4
5
6
7
8
9
10
SONY
D
1-671-103-31
H+(2000V)
H+(1000V)
IC6801
IC6652
12VREG
IC6653
9VREG
IC6700
IC6600
IC6654
IC6651
IC6604
CN6600
CN6102
CN6100
CN6101
CN6611
CN6677
CN6699A
CN6699B
CN6500
CN6655
CN6620
CN6700
CN6666
CN6644
CN6622
Q6803
H.OUT(U)
Q6804
H.OUT(L)
Q6805
Q6806
Q6808
Q6801
Q6851
T6801
HDT(U)
T6802
HDT(L)
T6804
FBT
T6852
DFT
T6601
PIT
T6600
T6651
SECONDARY
PRIMARY
DF-LINE
135V
LINE
GND
RY6601
RY6602
TH6600
TH6700
FB6602
FB6603
LF6801
LF6851
DGC CHK
AC IN
PCF IN
PCF OUT

D board Waveforms



570 mVp-p (V)
58 Vp-p (V)
2.28 Vp-p (H)
131 Vp-p (H)
2.14 Vp-p (H)
150 Vp-p (H)
1.07 kVp-p (H)
2.3 Vp-p (H)
1.72 kVp-p (H)
265 Vp-p (H)
1.98 Vp-p (V)
116 Vp-p (V)

IC Voltage Table

Ref No	Pin No	Voltage (V)
IC6600	1	134.7
	2	2.5
	3	9.1
	4	0
IC6700	1	1.4
	3	-12.2
	5	-0.8
	6	15.0
	7	1.4
IC6801	1	0
	2	0
	3	0
	5	2.2
	6	6.7
	7	0.1

Semiconductor Voltage Table

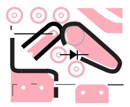
Ref	(e)	(b)	(c)	Ref	(e)	(b)	(c)
Q6676	1.8	2.5	5	Q6603	0	0	11.8
Q6677	1.8	2.1	5	Q6605	0	0.7	0
Q6678	1.8	1.6	5	Q6608	0	0	3.5
Q6807	0	6.4	0	Q6681	0	11.4	0
Q6801	0	0.3	61	Q6607	0.3	0.5	5
Q6802	0	-0.4	73.7	Q6851	0	-1	84.6
Q6803	0	135.2	0	**Ref**	**(s)**	**(g)**	**(d)**
Q6804	0	0	135.6	Q6805	0	2	22
Q6602	9.1	11.8	0	Q6806	0	1.4	135.7

D [PRINTED WIRING BOARD]

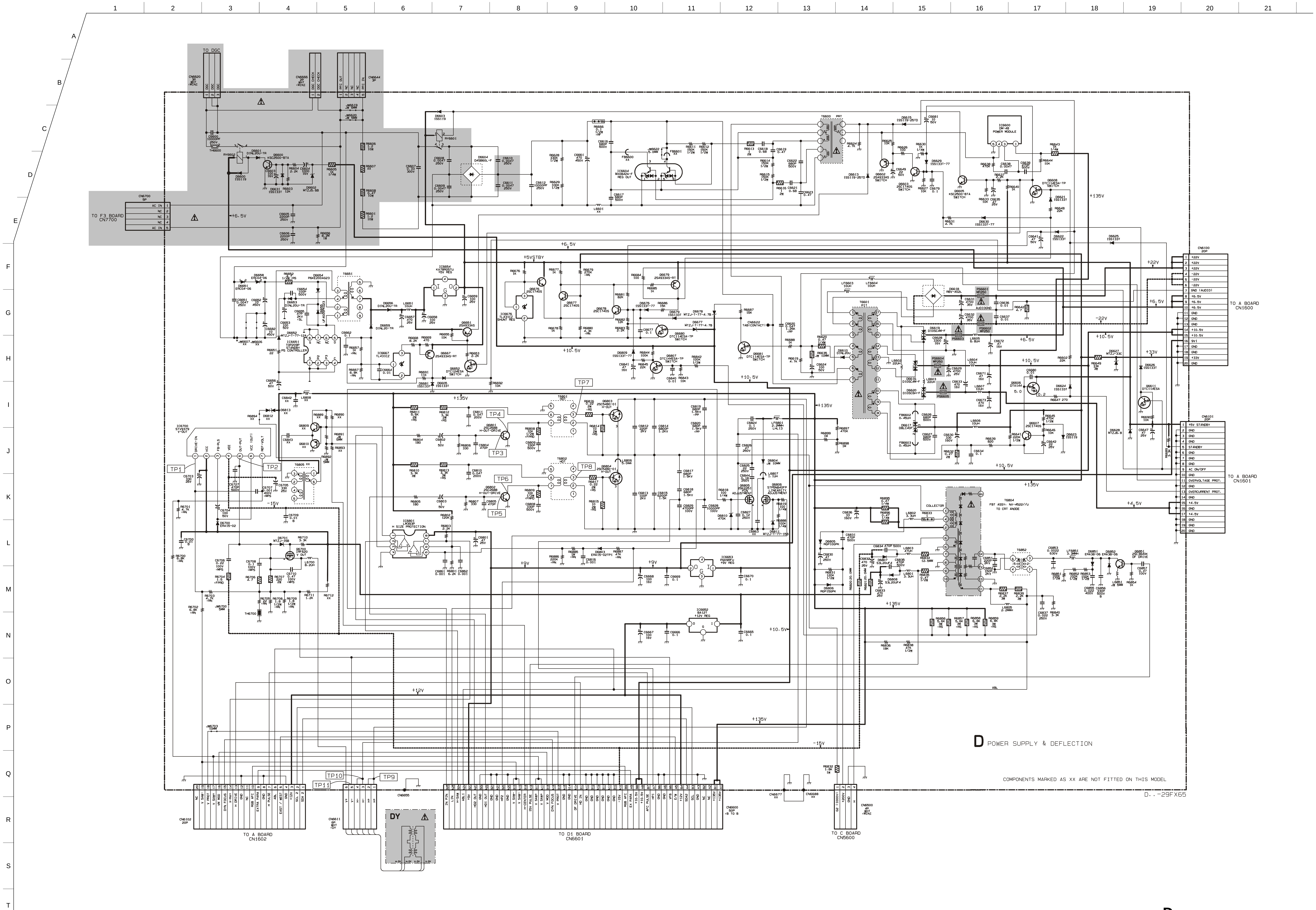
IC	
IC6600	I - 6
IC6604	K - 8
IC6651	M - 7
IC6652	G - 1
IC6653	I - 1
IC6654	L - 5
IC6667	N - 5
IC6676	M - 5
IC6700	F - 4
IC6801	C - 1

TRANSISTORS	
Q6600	G - 10
Q6602	I - 7
Q6603	H - 7
Q6605	L - 4
Q6606	M - 1
Q6607	I - 5
Q6608	L - 2
Q6611	M - 1
Q6651	M - 5
Q6652	N - 5
Q6667	M - 5
Q6676	M - 4
Q6677	N - 4
Q6678	M - 4
Q6679	M - 3
Q6680	M - 3
Q6681	M - 4
Q6700	G - 3
Q6801	B - 8
Q6802	F - 5
Q6803	B - 6
Q6804	E - 4
Q6805	D - 4
Q6806	C - 4
Q6807	M - 2
Q6851	B - 9

DIODE	
D6600	G - 10
D6601	G - 10
D6602	F - 10
D6603	L - 4
D6604	K - 9
D6605	M - 5
D6610	M - 3
D6613	M - 4
D6615	M - 3
D6616	I - 4
D6617	H - 4
D6618	K - 2
D6619	H - 3
D6620	I - 3
D6621	L - 2
D6622	M - 3
D6623	H - 5
D6624	M - 2
D6625	M - 2
D6626	M - 2
D6627	J - 1
D6628	N - 1
D6629	L - 3
D6630	L - 2
D6631	F - 10
D6651	M - 8
D6652	M - 8
D6653	M - 8
D6654	M - 7
D6655	M - 7
D6656	M - 5
D6658	M - 8
D6659	M - 6
D6676	M - 3
D6677	M - 3
D6678	M - 3
D6679	M - 4
D6681	M - 5
D6701	G - 3
D6805	C - 8
D6806	C - 8
D6807	G - 7
D6808	H - 7
D6809	M - 2
D6810	D - 4
D6811	D - 4
D6851	B - 8
D6852	B - 8



NOTE:
Portions of the circuit marked as shown are high voltage areas. Use care to prevent electric shock during inspection or repair.

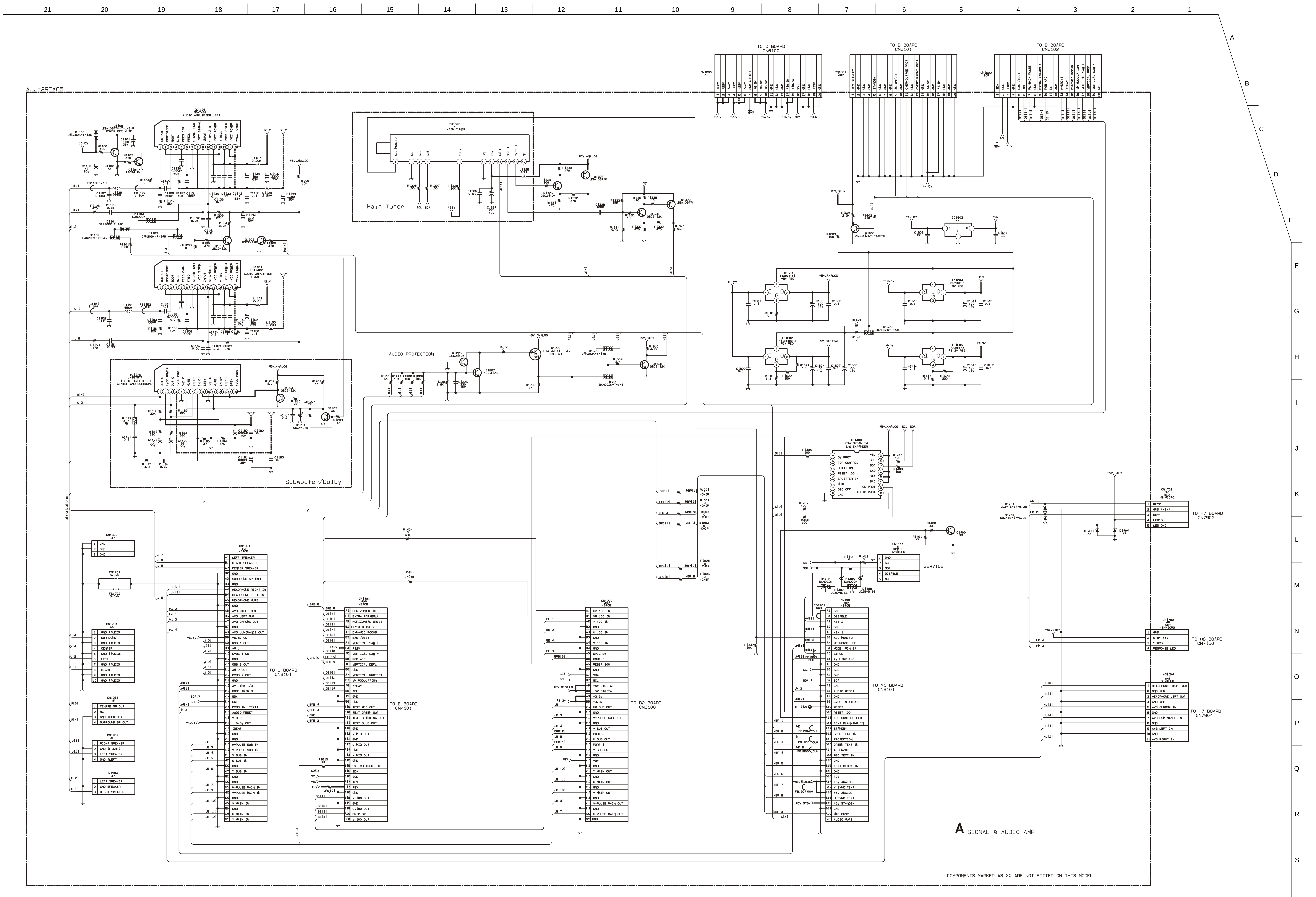

TO DGC
CN6620 3P WHT :MINI
CN6656 2P DGC CHECK
CN6644 3P PFC OUT PFC IN
CN6700 5P
TO F3 BOARD CN7700
AC IN
NC
NC
NC
AC IN
+6.5V
+5VSTBY
+135V
+10.5V
+22V
+33V
-22V
+9V
+12V
-15V
+4.5V
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
TP11
IC6600 DM-48 POWER MODULE
IC6651 TOP209P STANDBY PS CONTROLLER
IC6654 KA78R05TU +5V REG
IC6700 STV9379 V-OUT
IC6801 LM393P H SIZE PROTECTION
IC6653 PQ09RFU +9V REG
IC6652 BA12T +12V REG
T6600 PIT
T6601 PIT
T6651
T6801 HDT
T6802 HDT
T6804 FBT ASSY. NX-4522//J
TO CRT ANODE
COLLECTOR
CN6100 20P
1 +22V
2 +22V
3 +22V
4 -22V
5 -22V
6 -22V
7 GND (AUDIO)
8 +6.5V
9 +6.5V
10 +6.5V
11 GND
12 GND
13 GND
14 +10.5V
15 +10.5V
16 9V1
17 GND
18 GND
19 +33V
20 GND
TO A BOARD CN1600
CN6101 20P
1 +5V STANDBY
2 GND
3 GND
4 GND
5 STANDBY
6 GND
7 GND
8 GND
9 AC ON/OFF
10 GND
11 OVERVOLTAGE PROT.
12 GND
13 OVERCURRENT PROT.
14 GND
15 +4.5V
16 GND
17 +4.5V
18 GND
19 GND
20 GND
TO A BOARD CN1601
CN6102 20P
20 NC
19 V SAW-
18 V PROT
17 V SAW+
16 VM MOD
15 DYN FOCUS
14 X-RAY
13 H DRIVE
12 GND
11 NC
10 RGB AFC
9 EXTRA PARA
8 GND
7 H PULSE
6 ABL
5 EAST / WEST
4 GND
3 +12V
2 SCL 2
1 SDA 2
TO A BOARD CN1602
CN6611 6P WHT :DY
6 V+
5 V-
4 H-
3 H-
2 H+
1 H+
CN6655
DY
H.DY
H.DY
V.DY
V.DY
CN6600 50P :B TO B
B25 IN PIN
A25 LIN
B24 H-SAW
A24 ABL1
B23 +9V
A23 HD2 OUT
B22 GND
A22 HD1 OUT
B21 GND
A21 GND
B20 HP2
A20 GND
B19 V SAW-
A19 V SAW-
B18 H-CENTER
A18 15V PULSE
B17 V SAW+
A17 V SAW+
B16 V MOD
A16 DYN FOCUS
B15 V PROT
A15 GND
B14 GND
A14 DF DRIVE
B13 HD IN
A13 GND
B12 GND
A12 GND
B11 GND
A11 GND
B10 GND
A10 -15V
B9 RGB AFC
A9 EX PARA
B8 +10.5V
A8 +10.5V
B7 AFC PULSE
A7 HP1
B6 GND
A6 GND
B5 VFB
A5 E/W
B4 +12V
A4 SDA2
B3 SCL
A3 GND
B2 NC
A2 NC
B1 +135V
A1 +135V
TO D1 BOARD CN6601
CN6677 xx
CN6688 xx
CN5600 4P WHT :MINI
G2 (1000V)
+200V
GND
H
TO C BOARD CN5600
ABL

D POWER SUPPLY & DEFLECTION

COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL

D..-29FX65

D [POWER SUPPLY AND DEFLECTION]


A..-29FX65
TO D BOARD CN6100
TO D BOARD CN6101
TO D BOARD CN6102
IC1126 TDA7482 AUDIO AMPLIFIER LEFT
IC1151 TDA7482 AUDIO AMPLIFIER RIGHT
IC1176 LM1876TF AUDIO AMPLIFIER CENTER AND SURROUND
TU1326 MAIN TUNER
Main Tuner
AUDIO PROTECTION
Subwoofer/Dolby
IC1400 CXA1875AM-T4 I/O EXPANDER
IC1601 +5V REG
IC1602 +5V REG
IC1604 +9V REG
IC1605 +3.3V REG
SERVICE
TO J BOARD CN8101
TO E BOARD CN4101
TO B2 BOARD CN3100
TO M1 BOARD CN9101
TO H7 BOARD CN7902
TO H8 BOARD CN7150
TO H7 BOARD CN7904
A SIGNAL & AUDIO AMP

COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL

A **[SIGNAL AND AUDIO AMPLIFIER]**

IC Voltage Table

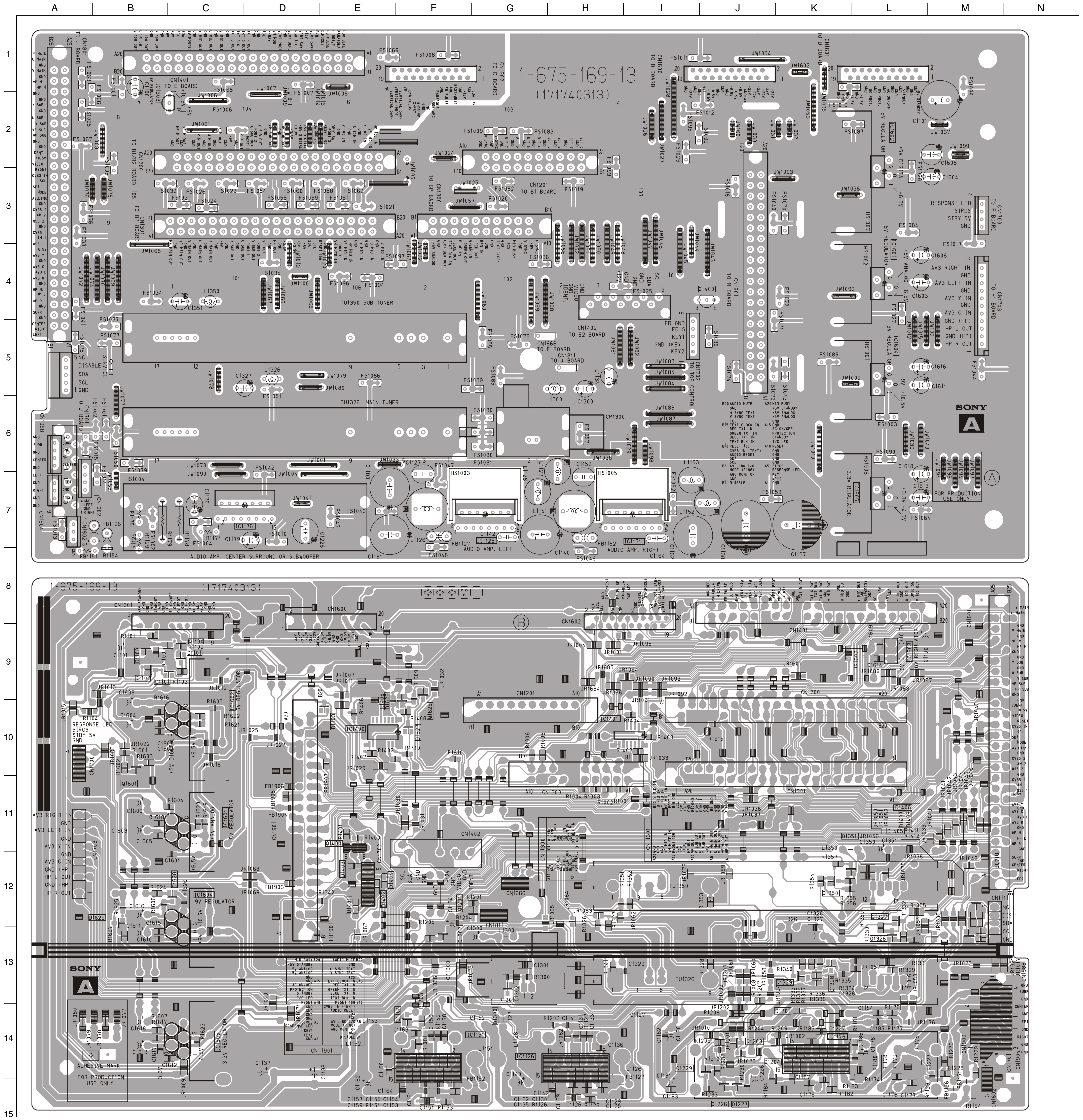
IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC1126	1	0
	2	-11
	3	10
	6	-19
	9	0
	10	4.1
	12	-11
IC1151	1	0
	2	-11
	3	10
	6	-18
	9	0
	10	4.1
	12	-11
IC1400	1	0
	3	4.6
	5	4.6
	6	4.0
	9	0
	10	0
	14	4.5
	15	4.5
IC1176	1	0
	3	3
	6	3
	7	0
	8	0
	9	0
	11	3
	12	0
	13	0
	14	0

Semiconductor Location Table

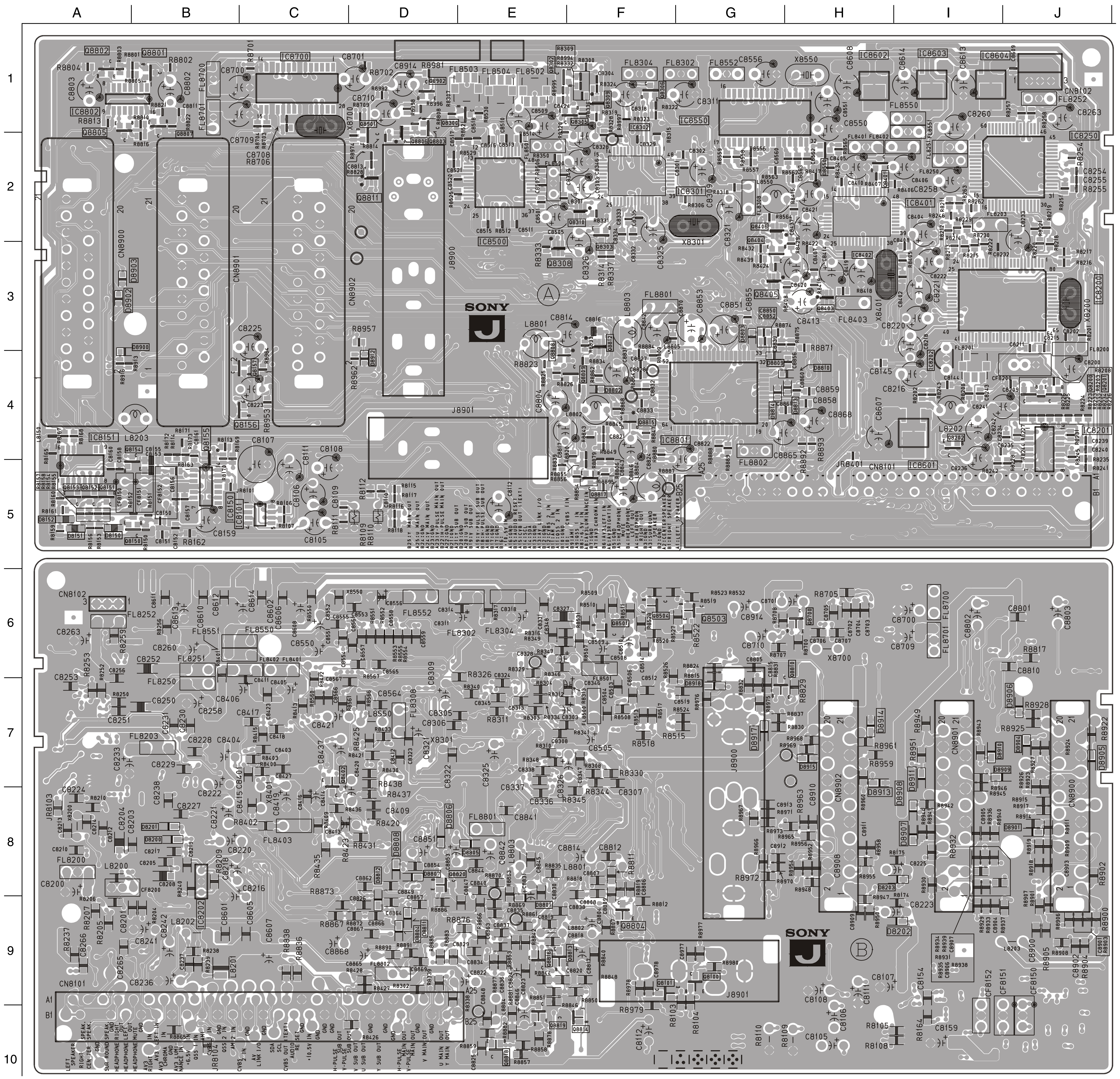
IC		Q1403	L - 9
IC1126	G - 7	Q1404	L - 9
IC1151	I - 7	Q1405	M - 8
IC1176	K - 14	Q1406	M - 9
IC1400	E - 10	Q1601	B - 11
IC1601	L - 4	Q1602	C - 9
IC1604	L - 5	Q1626	F - 9
IC1605	L - 7	**DIODE**	
IC1630	I - 2	D1101	B - 9
IC1631	L - 2	D1101	B - 9
TRANSISTOR		D1102	B - 9
Q1100	B - 9	D1103	D - 10
Q1101	C - 9	D1104	E - 14
Q1201	F - 12	D1201	K - 13
Q1202	F - 12	D1401	E - 12
Q1204	F - 12	D1402	E - 12
Q1226	J - 15	D1405	L - 11
Q1227	J - 15	D1406	L - 11
Q1229	I - 14	D1407	L - 11
Q1300	G - 13	D1408	L - 11
Q1326	L - 12	D1601	C - 9
Q1327	L - 12	D1602	C - 9
Q1328	K - 13	D1626	B - 12
Q1329	K - 13	D1627	F - 10
Q1401	L - 9	D1630	H - 1
Q1402	L - 9	D1631	L - 3

Semiconductor Voltage Table

Ref	(e)	(b)	(c)	Ref	(e)	(b)	(c)
Q1100	10.5	10.6	0	Q1229	5	4.9	0
Q1101	0	0	2.2	Q1326	1.2	1.8	4.4
Q1201	0	0.6	0	Q1327	5	4.4	1.7
Q1202	0	0.1	2.1	Q1328	2.6	3.2	8.3
Q1300	0	4.6	0	Q1329	5	8.3	4.5
Q1226	0	0	4.9	Q1601	0	0	5
Q1227	0	0	4.9	Q1602	3.9	3.3	0


A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
1-675-169-13
(171740313)
SONY
A
TU1350 SUB TUNER
TU1326 MAIN TUNER
AUDIO AMP. CENTER SURROUND OR SUBWOOFER
AUDIO AMP. LEFT
AUDIO AMP. RIGHT
5V REGULATOR
9V REGULATOR
3.3V REGULATOR
FOR PRODUCTION USE ONLY
ADHESIVE MARK
B

A [PRINTED WIRING BOARD]



J [PRINTED WIRING BOARD]

Semiconductor Location Table

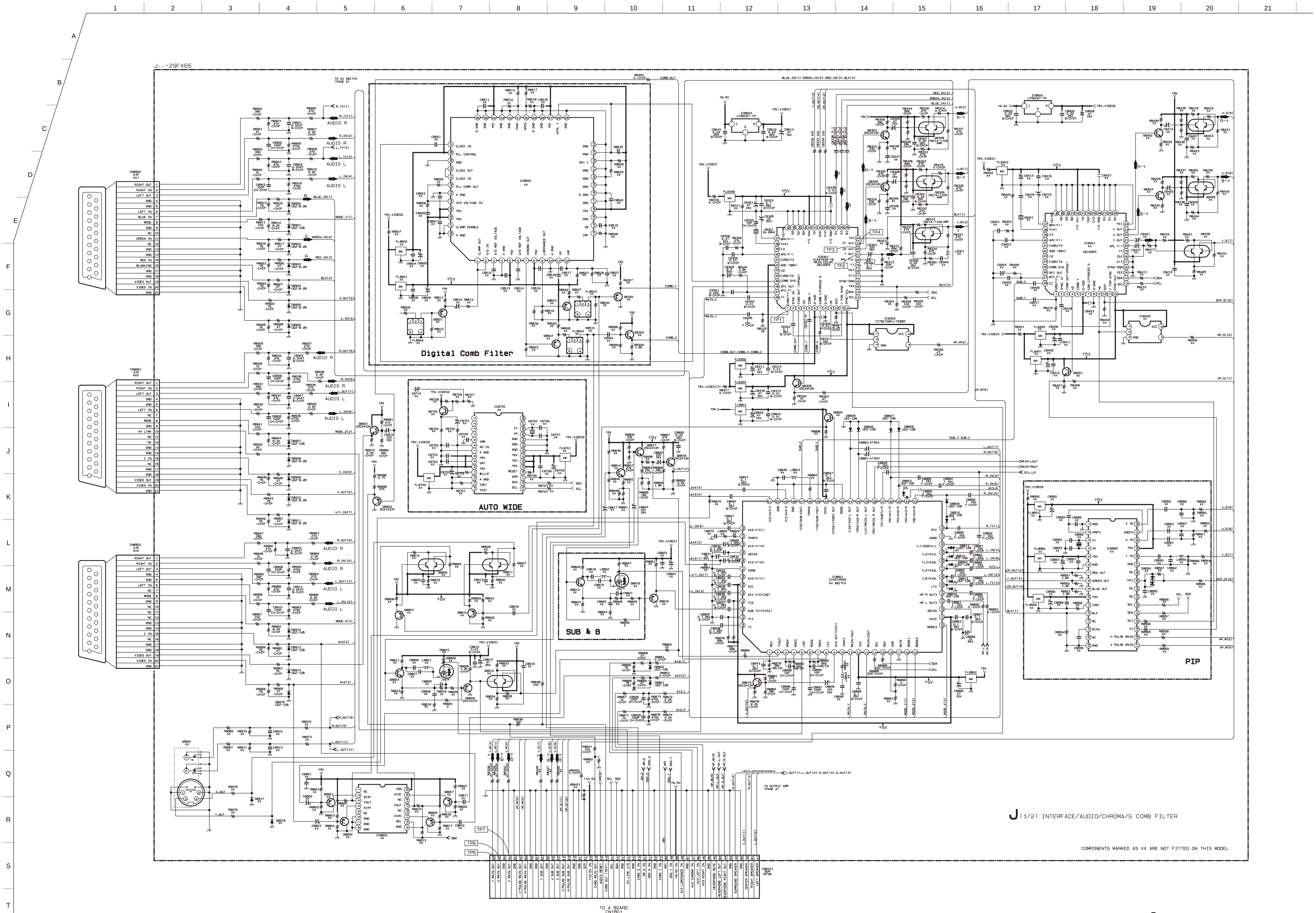
IC		Q8150	A - 5	Q8405	G - 3	D8810	G - 4
IC8101	B - 5	Q8151	A - 5	Q8406	G - 2	D8811	D - 9
IC8150	B- 5	Q8152	A - 5	Q8501	F - 6	D8812	D - 8
IC8151	A - 4	Q8153	A - 5	Q8901	D - 1	D8813	G - 4
IC8200	J - 3	Q8154	A - 4	**DIODE**		D8814	G - 4
IC8201	J - 4	Q8156	B - 4	D8150	A - 5	D8900	A - 3
IC8202	I - 3	Q8157	C - 4	D8151	A - 5	D8901	J - 8
IC8301	F - 2	Q8200	J - 3	D8152	A - 5	D8902	A - 3
IC8302	F - 1	Q8201	J - 4	D8153	I - 4	D8903	A - 3
IC8401	I - 2	Q8202	I - 4	D8200	B - 8	D8904	J - 7
IC8402	H - 2	Q8300	D - 1	D8201	B - 8	D8905	J - 7
IC8500	E - 2	Q8302	E - 1	D8202	H - 9	D8906	I - 7
IC8550	G - 1	Q8303	F - 2	D8203	H - 8	D8907	I - 8
IC8601	I - 4	Q8305	E - 1	D8801	E - 8	D8908	I - 8
IC8602	H - 1	Q8306	F - 1	D8802	F - 4	D8909	I - 7
IC8603	I - 1	Q8308	E - 3	D8803	G - 3	D8910	I - 7
IC8604	I - 1	Q8309	F - 1	D8804	D - 9	D8911	I - 7
IC8700	C - 1	Q8310	E - 2	D8805	D - 8	D8912	D - 3
IC8801	F - 4	Q8401	H - 2	D8806	D - 8	D8913	H - 7
TRANSISTOR		Q8402	C - 7	D8807	D - 8	D8914	H - 7
Q8100	G - 9	Q8403	H - 3	D8808	D - 8	D8915	H - 7
Q8101	F - 9	Q8404	G - 2	D8809	G - 3		

Semiconductor Voltage Table

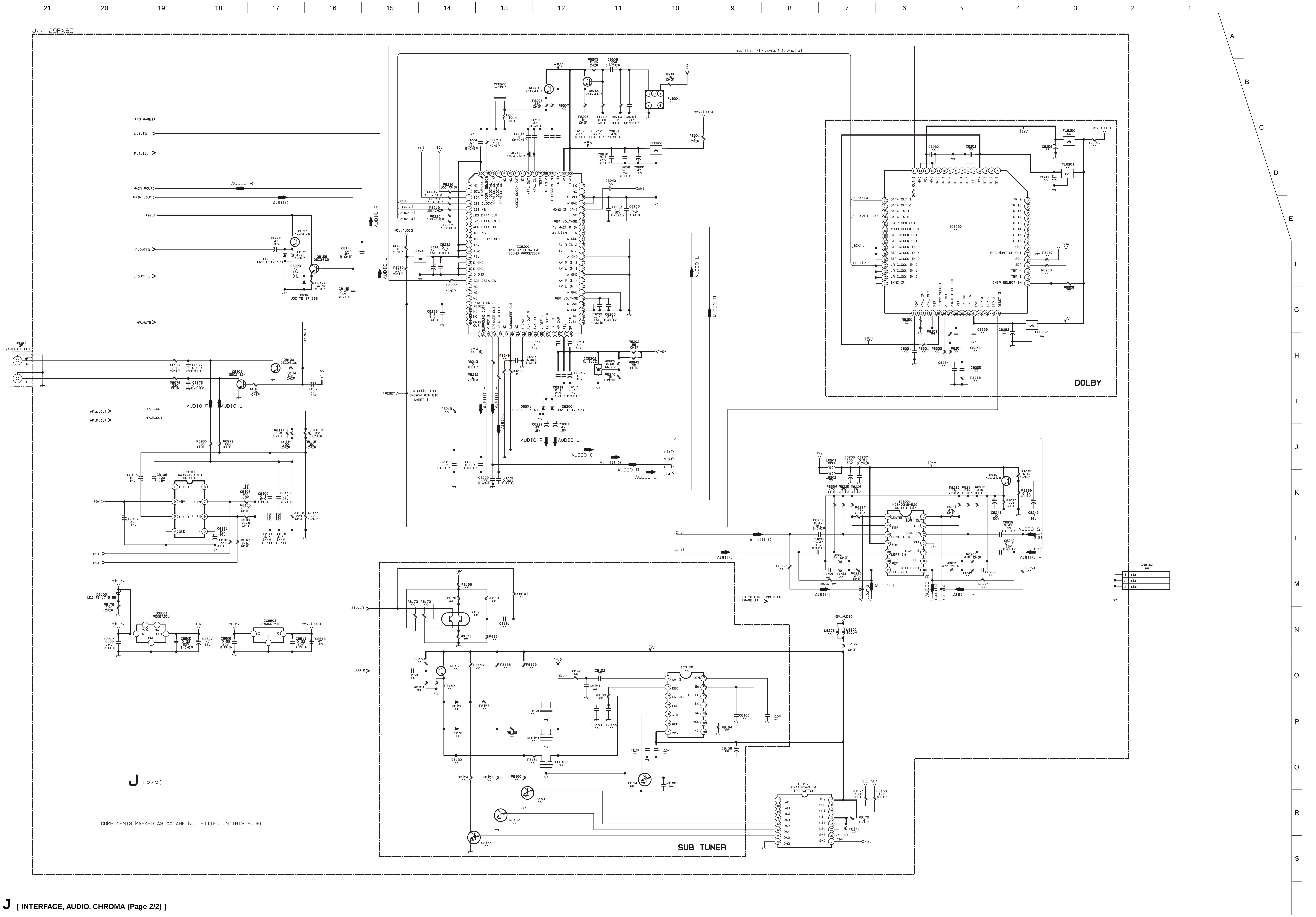
Ref	(e)	(b)	(c)	Ref	(e)	(b)	(c)
Q8150	2.9	3.6	5.0	Q8302	1.0	1.6	9.0
Q8151	0	0.4	4.8	Q8303	1.3	1.9	7.7
Q8152	0	4.6	0	Q8305	1.3	1.9	7.3
Q8153	0	0.4	4.8	Q8306	0.1	0.1	5.0
Q8154	0	4.6	0	Q8401	0.1	0.1	5.0
Q8156	3.9	4.6	9.0	Q8404	1.2	1.9	7.4
Q8157	3.9	4.6	9.0	Q8809	2.7	2.1	0
Q8200	1.9	2.5	5.0	Q8817	3.9	4.6	9.0
Q8201	1.2	1.9	5.0	Q8901	1.9	2.5	9.0
Q8202	5.1	5.8	9.0	**Ref**	**(s)**	**(g)**	**(d)**
Q8300	1.6	1.0	0	Q8815	1.8	0	0.6

IC Voltage Table

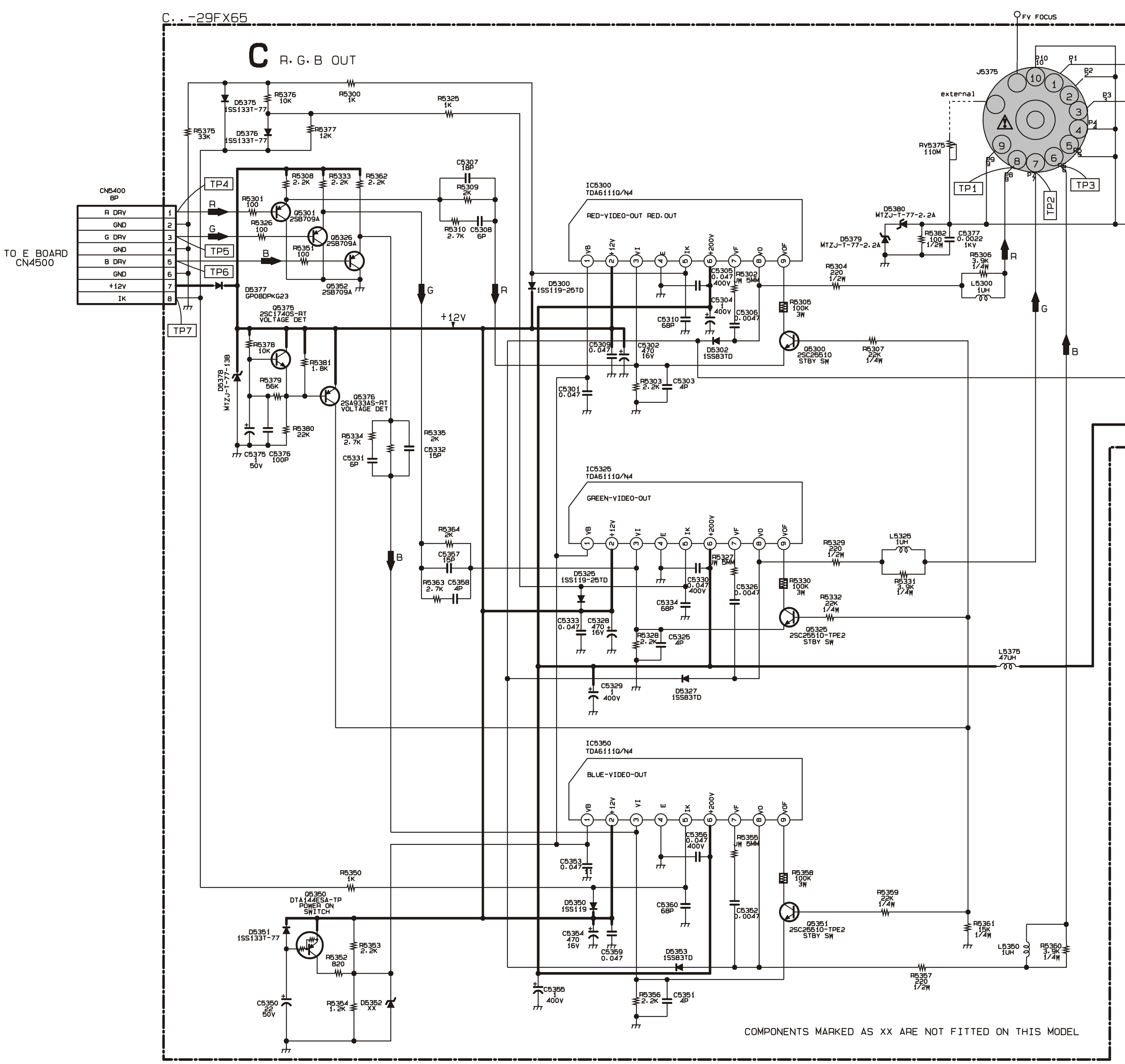
IC Voltage Table					
Ref No	**Pin No**	**Voltage (V)**	Ref No	**Pin No**	**Voltage (V)**
IC8200	2-3	4.7	IC8500	1-2	1.5
	4-6	2.5		3	0.5
	7	0.6		6	2.6
	17	0.7		7	0.9
	21	5.0		9	1.0
	36	3.8		11	2.8
	37	3.7		12-13	1.8
	38	7.0		14	1.0
	40	7.0		22-23	5.0
	45	3.7		26	5.0
	56-57	3.8		30	5.0
	58	2.6		37	2.4
	60	3.8		40-42	1.9
	67	0.4		44	1.9
	68-69	1.5	IC8101	1	4.2
	71	2.4		3	4.1
	72	2.2		5	0.6
IC8201	1-3	5.0		8	0.5
	5-10	5.0	IC8801	1	1.8
	12-14	5.0		2-4	4.5
IC8301	1	2.4		5	0
	2	1.9		6-7	4.6
	3	1.5		8	0
	4	0.1		9	4.6
	5	2.4		10	3.4
	7	2.6		11	3.8
	9	0.3		13	4.5
	10	0.8		22-30	4.5
	11	2.5		32-41	4.5
	13-14	4.5		43	4.6
	20	2.4		45	3.7
	21	1.8		46	3.5
	22-23	1.9		47	4.5
	24	0.1		49	4.5
	25-27	2.5		51-80	4.5
	29	2.8	IC8151	2	2.4
	37	1.1		3	4.6
	38	4.0		4	4.6
IC8401	1	2.3		5	0.4
	2	1.9		6	4.6
	4	0.1		7	0.4
	9	0.3		9	0
	10	4.0		10	2.6
	11	2.4	IC8150	1	3.0
	20	2.4		2	2.5
	21	1.7		3	1.7
	22-23	1.9		6	4.3
	37	1.1		12	2.4
	38	4.0		13	4.6
	40	3.3		14	2.5
	47	3.8			
	48	1.8			


J..-29FX65
TO AV SWITCH (PAGE 2)
CN8900 21P AV1
CN8901 21P AV2
CN8902 21P AV4
Digital Comb Filter
IC8500
AUTO WIDE
IC8700
SUB & B
IC8301 CXA2163Q-T6 MAIN COLOR DECODER
IC8302 TC7SET08FU-TE85R
IC8401 DECODER
IC8402
IC8801 CXA2149AQ AV SWITCH
IC8550
PIP
IC8802
J900
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TO OUTPUT AMP (PAGE 2)
CN8101 50P B70B
TO A BOARD CN1801
J (1/2) INTERFACE/AUDIO/CHROMA/G COMB FILTER
COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL

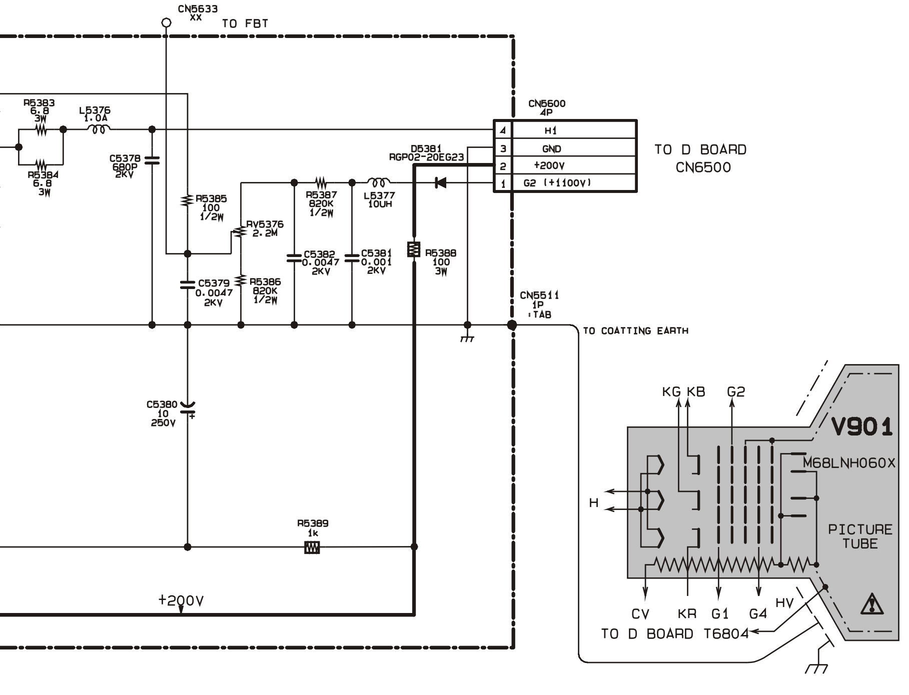
J **[INTERFACE, AUDIO, CHROMA (Page 1/2)]**


J..-29FX65
IC8200 MSP3410D-QA-B4 SOUND PROCESSOR
IC8250
DOLBY
IC8201 MC3403NS-E20 OUTPUT AMP
IC8101 TDA2822D013TR HP OUT
IC8601 PQ09TZ5U
IC8603 LF50CDT-TR
IC8150
IC8151 CXA1875AM-T4 I2C SWITCH
CN8102
SUB TUNER
J (2/2)
COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL
AUDIO R
AUDIO L
AUDIO C
AUDIO S
TO 50 PIN CONNECTOR (PAGE 1)
TO CONNECTOR CN8904 PIN B15 SHEET 1

J [INTERFACE, AUDIO, CHROMA (Page 2/2)]


C..-29FX65
C R.G.B OUT
TO E BOARD CN4500
CN5400 8P
R DRV
GND
G DRV
GND
B DRV
GND
+12V
IK
TP4
TP5
TP6
TP7
R
G
B
R5375 33K
D5375 1SS133T-77
D5376 1SS133T-77
R5376 10K
R5377 12K
R5300 1K
R5325 1K
R5308 2.2K
R5333 2.2K
R5362 2.2K
R5301 100
R5326 100
R5351 100
Q5301 2SB709A
Q5326 2SB709A
Q5352 2SB709A
D5377 GP08DPKG23
Q5375 2SC1740S-RT VOLTAGE DET
Q5376 2SA933AS-RT VOLTAGE DET
R5378 10K
R5379 56K
R5380 22K
R5381 1.8K
D5378 MTZJ-T-77-13B
C5375 1 50V
C5376 100P
C5307 18P
R5309 2K
R5310 2.7K
C5308 6P
R5334 2.7K
C5331 6P
R5335 2K
C5332 15P
R5364 2K
C5357 15P
R5363 2.7K
C5358 4P
+12V
D5300 1SS119-25TD
IC5300 TDA6111Q/N4
RED-VIDEO-OUT RED.OUT
IC5325 TDA6111Q/N4
GREEN-VIDEO-OUT
IC5350 TDA6111Q/N4
BLUE-VIDEO-OUT
VB
+12V
VI
E
IK
+200V
VF
VO
VOF
C5301 0.047
C5309 0.047
C5302 470 16V
R5303 2.2K
C5303 4P
C5310 68P
C5305 0.047 400V
C5304 1 400V
R5302 1W 5MM
C5306 0.0047
D5302 1SS83TD
R5305 100K 3W
Q5300 2SC2551D STBY SW
R5304 220 1/2W
R5307 22K 1/4W
D5325 1SS119-25TD
C5333 0.047
C5328 470 16V
R5328 2.2K
C5325 4P
C5334 68P
C5330 0.047 400V
R5327 1W 5MM
C5326 0.0047
R5330 100K 3W
Q5325 2SC2551D-TPE2 STBY SW
R5329 220 1/2W
R5332 22K 1/4W
L5325 1UH
R5331 3.9K 1/4W
C5329 1 400V
D5327 1SS83TD
L5375 47UH
R5350 1K
Q5350 DTA144ESA-TP POWER ON SWITCH
D5351 1SS133T-77
R5352 820
R5353 2.2K
C5350 22 50V
R5354 1.2K
D5352 XX
C5353 0.047
D5350 1SS119
C5354 470 16V
C5359 0.047
C5360 68P
C5356 0.047 400V
R5355 1W 5MM
C5352 0.0047
R5358 100K 3W
Q5351 2SC2551D-TPE2 STBY SW
R5359 22K 1/4W
R5361 15K 1/4W
L5350 1UH
R5360 3.9K 1/4W
R5357 220 1/2W
D5353 1SS83TD
C5355 1 400V
R5356 2.2K
C5351 4P
+200V

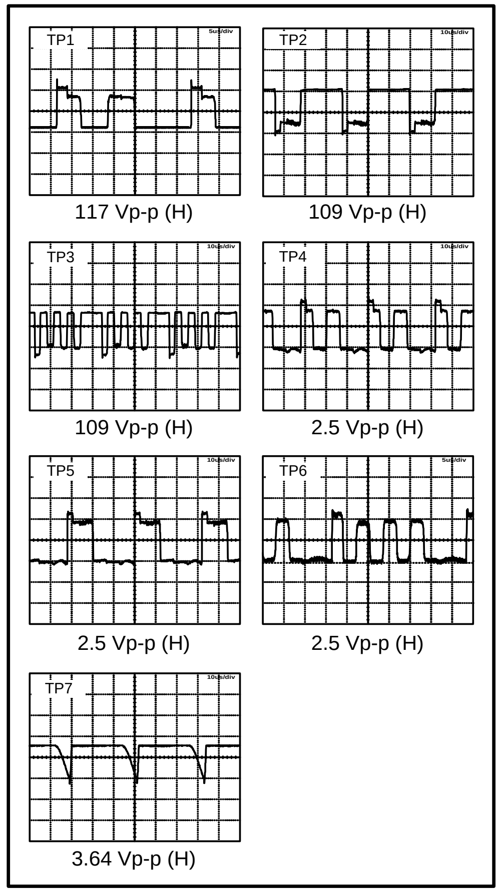
COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL


FV FOCUS
CN5633 XX
TO FBT
J5375
external
P10
P1
P2
P3
P4
P5
P6
P7
P8
P9
RV5375 110M
TP1
TP2
TP3
D5380 MTZJ-T-77-2.2A
D5379 MTZJ-T-77-2.2A
R5382 100 1/2W
C5377 0.0022 1KV
R5306 3.9K 1/4W
L5300 1UH
R5383 6.8 3W
R5384 6.8 3W
L5376 1.0A
C5378 680P 2KV
R5385 100 1/2W
C5379 0.0047 2KV
C5380 10 250V
RV5376 2.2M
R5386 820K 1/2W
R5387 820K 1/2W
C5382 0.0047 2KV
L5377 10UH
C5381 0.001 2KV
D5381 RGP02-20EG23
R5388 100 3W
R5389 1k
CN5600 4P
H1
GND
+200V
G2 (+1100V)
TO D BOARD CN6500
CN5511 1P :TAB
TO COATTING EARTH
+200V
KG KB G2
V901
M68LNH060X
PICTURE TUBE
H
CV KR G1 G4 HV
TO D BOARD T6804

Ref	(e)	(b)	(c)	Ref	(e)	(b)	(c)
Q5301	3.5	2.8	0	Q5300	3.7	4.4	3.8
Q5326	3.6	3	0	Q5325	3.7	4.4	3.8
Q5352	3.7	3	0	Q5351	3.8	4.4	3.9
Q5375	10.3	10.9	11	Q5350	11	10.9	3.9
Q5376	11	10.3	10.9				

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC5300	1	3.9
	3	3.8
	5	8.4
	7	153.0
	8	157.0
	9	152.0
IC5325	1	3.9
	3	3.8
	5	8.7
	7	150.0
	8	155.0
	9	150.0
IC5350	1	3.9
	3	3.8
	5	8.4
	7	150.0
	8	156.0
	9	149.0

C board Waveforms



117 Vp-p (H)

109 Vp-p (H)

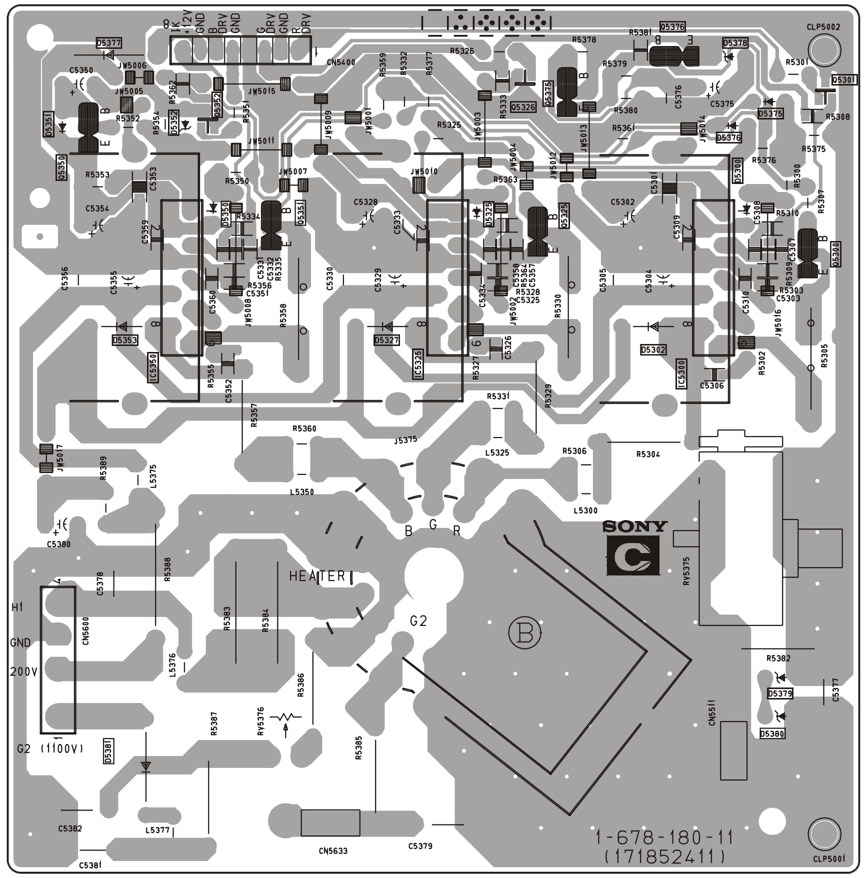
109 Vp-p (H)

2.5 Vp-p (H)

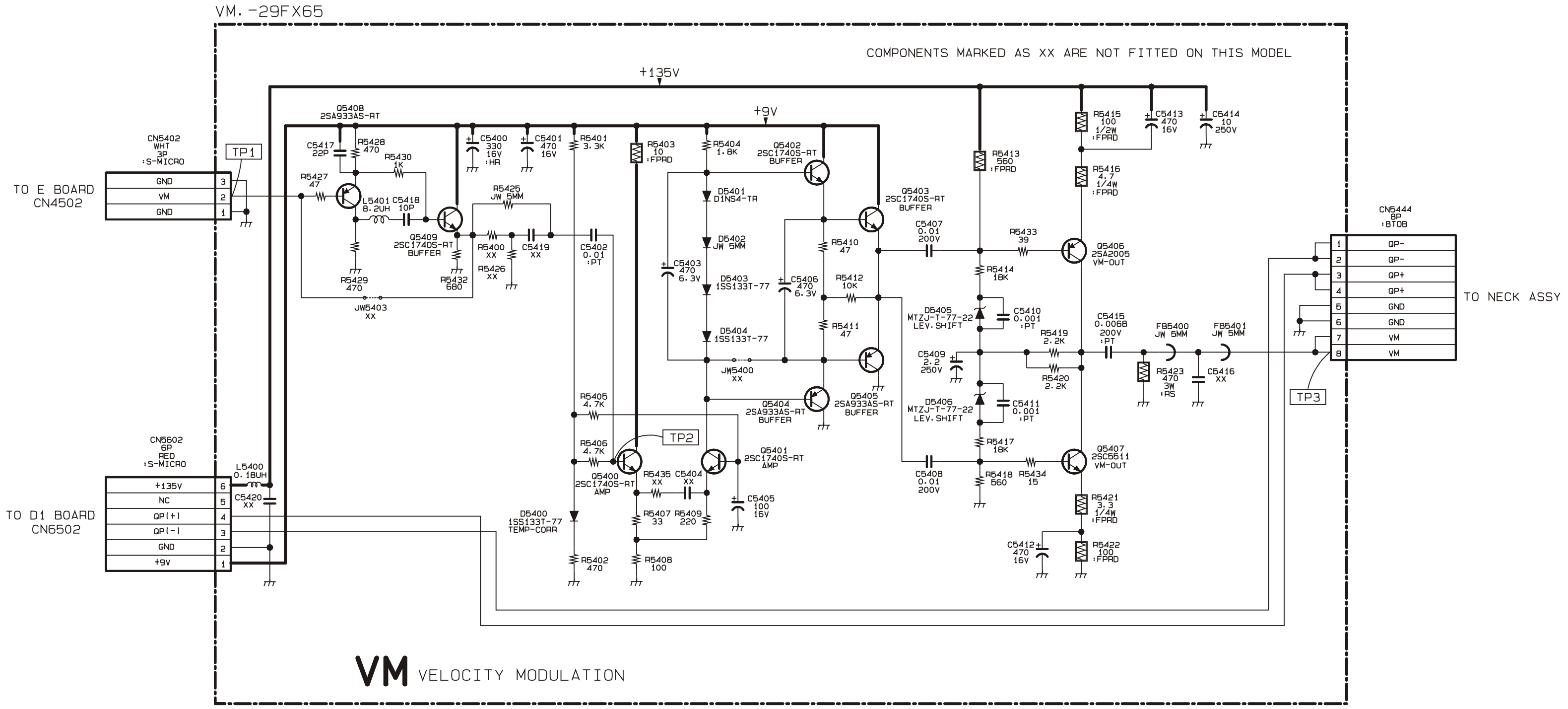
2.5 Vp-p (H)

2.5 Vp-p (H)

3.64 Vp-p (H)

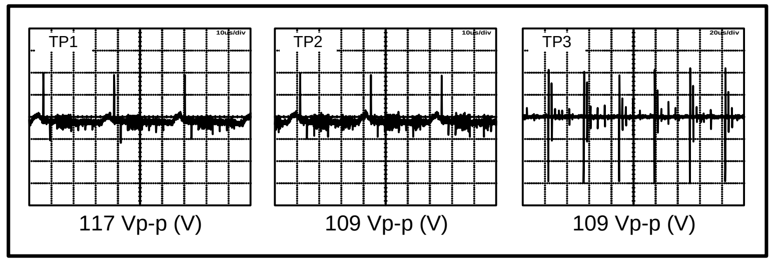

CLP5002
CLP5001
SONY
C
HEATER
G2
B
B G R
H1
GND
200V
G2 (1100V)
CN5600
CN5633
CN5511
1-678-180-11
(171852411)

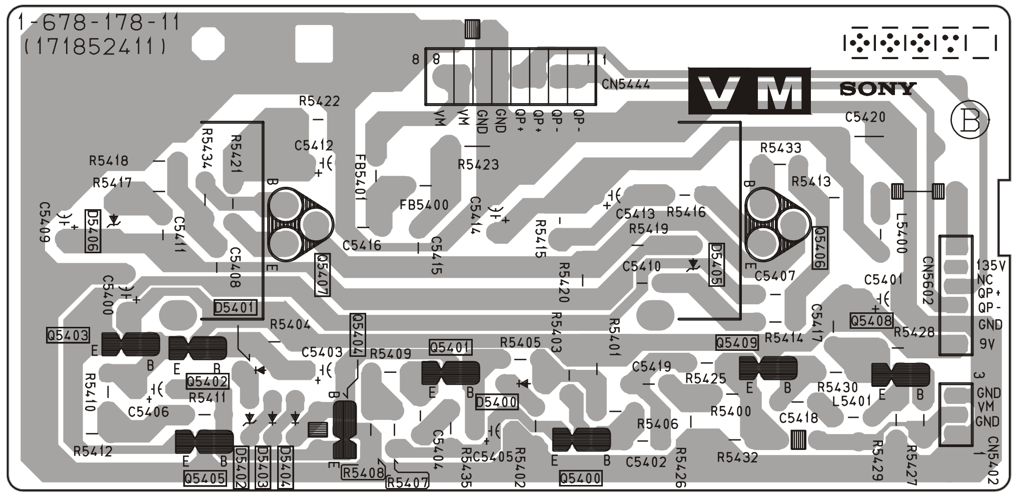
C [PRINTED WIRING BOARD]


VM.-29FX65
COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL
+135V
+9V
TO E BOARD CN4502
TO D1 BOARD CN6502
TO NECK ASSY
TP1
TP2
TP3
VM VELOCITY MODULATION

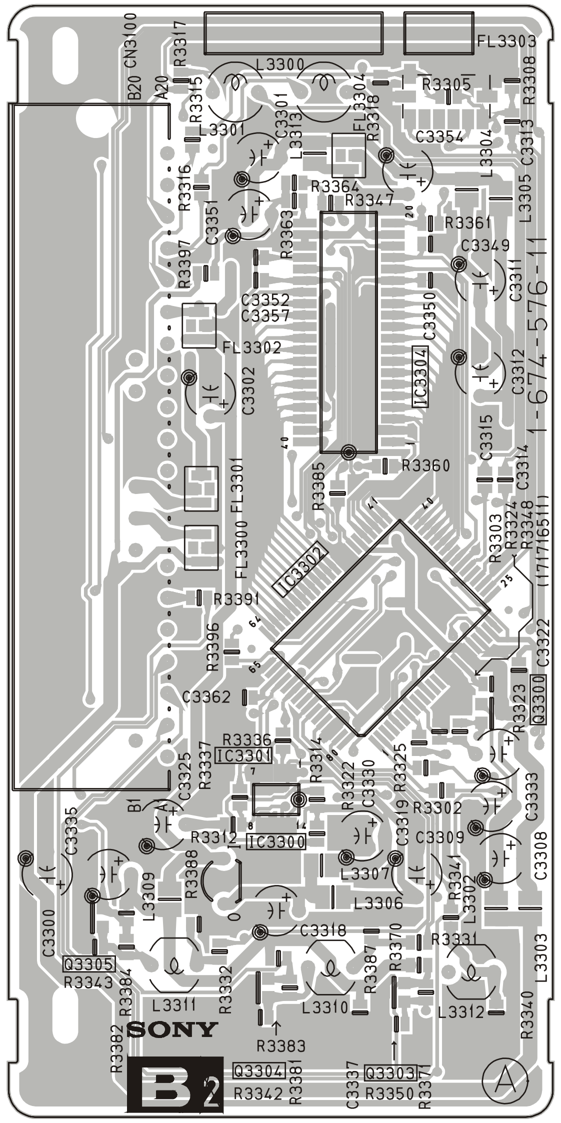
Ref	(e)	(b)	(c)
Q5400	0.9	1.5	9.0
Q5401	1.0	1.6	5.2
Q5402	6.0	6.6	9.0
Q5403	5.9	6.0	9.0
Q5404	5.2	5.9	0
Q5405	5.9	5.8	0
Q5406	135.1	134.6	68.2
Q5407	0.8	1.4	68.2
Q5408	7.6	6.9	1.4
Q5409	6.9	7.5	9.0

VM board Waveforms

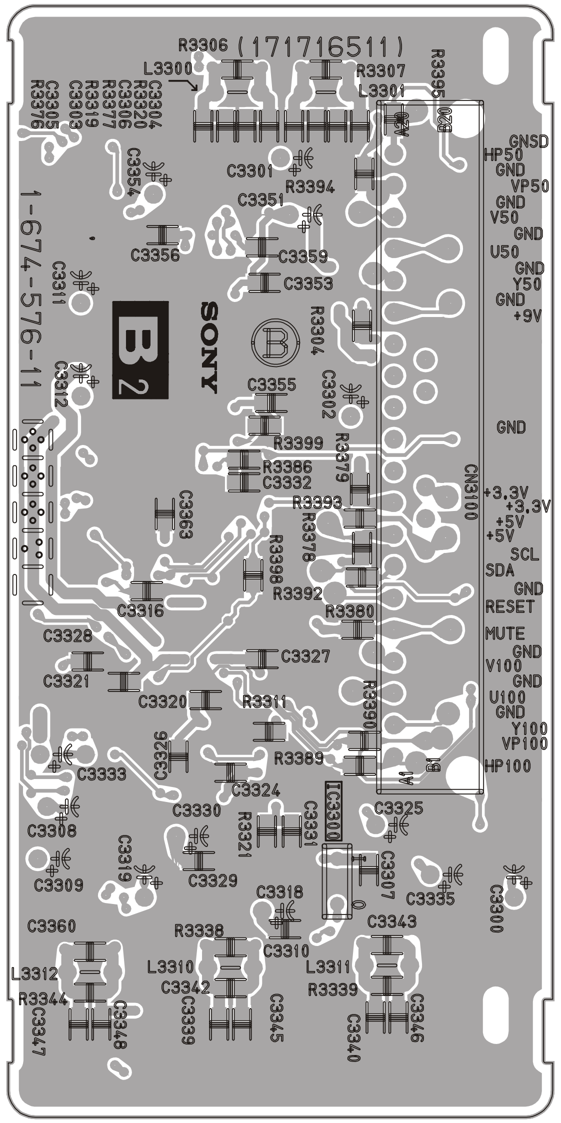



1-678-178-11
(171852411)
VM
SONY
CN5444
CN5602
CN5402

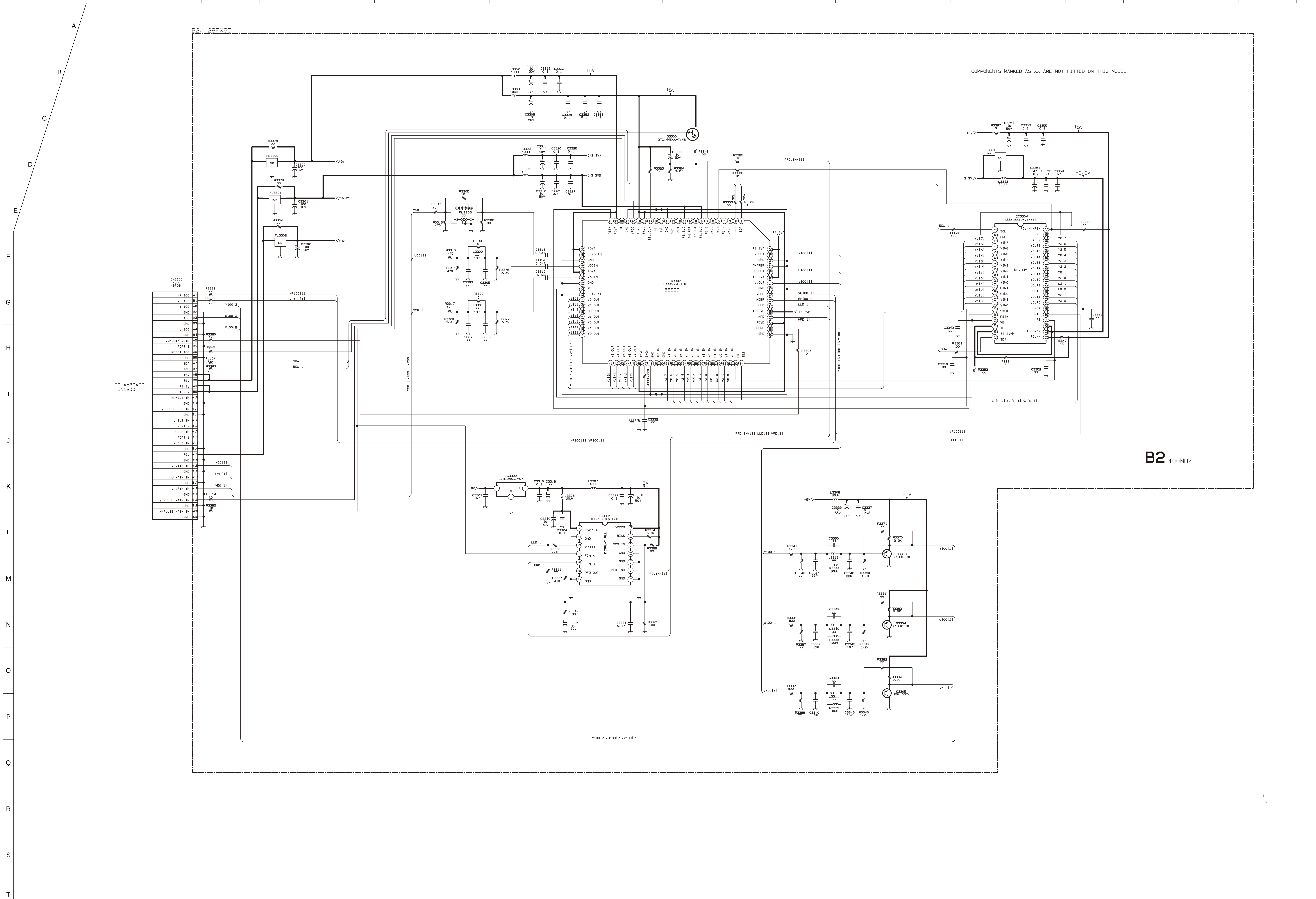
VM [PRINTED WIRING BOARD]


1-674-576-11
(171716511)
SONY
B2
IC3301
IC3302
IC3304
CN3100

B2 [PRINTED WIRING BOARD [A] SIDE]


R3306 (171716511)
1-674-576-11
B2
SONY
CN3100
GND
+9V
+3.3V
+5V
SCL
SDA
RESET
MUTE

B2 [PRINTED WIRING BOARD [B] SIDE]

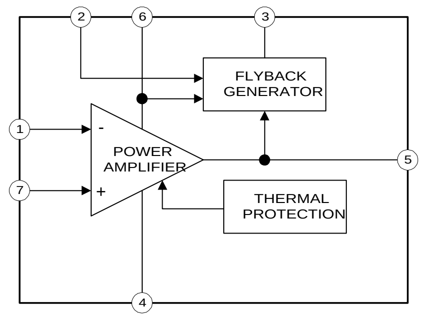

B2.-29FX65
COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL
B2 100MHZ
TO A-BOARD CN1200
CN3100 40P -BTOB
IC3302 SAA4977H-518 BESIC
IC3304 SAA4956TJ-V1-518 MEMORY
IC3300 L78L05ACZ-AP
IC3301 TLC2932IPW-E20 DISPLAY-PLL
Q3300 DTC144EKA-T146
Q3303 2SA1037K
Q3304 2SA1037K
Q3305 2SA1037K
FL3300
FL3301
FL3302
FL3303
FL3304
+5V
+3.3V
+9V
+3.3VA
+3.3VD
HP100[1]
VP100[1]
SDA[1]
SCL[1]
Y50[1]
U50[1]
V50[1]
Y100[1]
U100[1]
V100[1]
Y100[2]
U100[2]
V100[2]
LLD[1]
HRD[1]
PFD.INH[1]
HP100[1]-VP100[1]
PFD.INH[1]-LLD[1]-HRD[1]
Y100[2]-U100[2]-V100[2]
Y2[0-7]-U2[0-1]-V2[0-1]
HP 100
VP 100
Y 100
U 100
V 100
VM-OUT/ MUTE
PORT 3
RESET 100
SDA
SCL
HP-SUB IN
V-PULSE SUB IN
PORT 2
U SUB IN
PORT 1
Y SUB IN
Y MAIN IN
U MAIN IN
V MAIN IN
V-PULSE MAIN IN
H-PULSE MAIN IN
GND

B2[100Hz PROCESSOR]

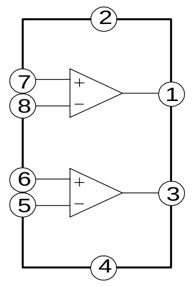
]

5-5. IC BLOCK DIAGRAMS

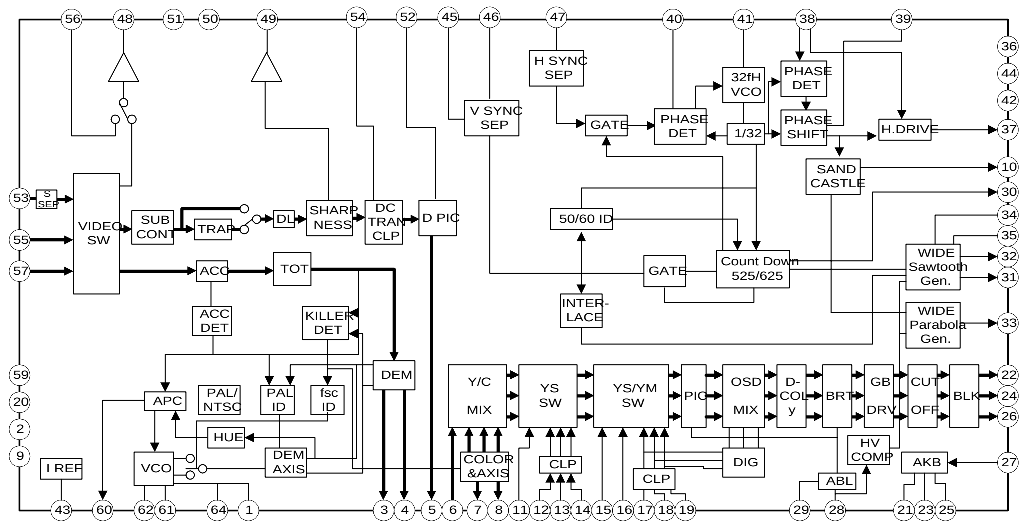
D BOARD IC6700 STV 9379


2
6
3
FLYBACK GENERATOR
1
POWER AMPLIFIER
5
7
THERMAL PROTECTION
4

J BOARD IC8101 TDA2822D



E BOARD IC4301 CXA2100Q-TL


56
48
51
50
49
54
52
45
46
47
40
41
38
39
36
44
42
37
10
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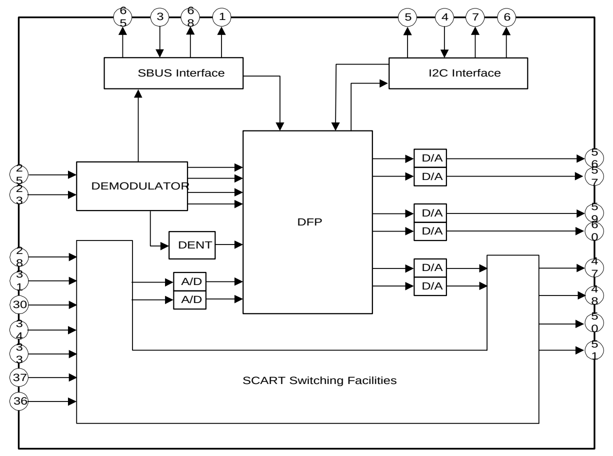
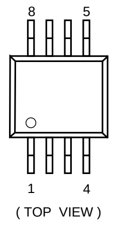
34
35
32
31
33
22
24
26
27
53
55
57
59
20
2
9
43
60
62
61
64
1
3
4
5
6
7
8
11
12
13
14
15
16
17
18
19
29
28
21
23
25
S SEP
VIDEO SW
SUB CONT
TRAP
DL
SHARP NESS
DC TRAN CLP
D PIC
V SYNC SEP
H SYNC SEP
GATE
PHASE DET
32fH VCO
1/32
PHASE DET
PHASE SHIFT
H.DRIVE
SAND CASTLE
50/60 ID
GATE
Count Down 525/625
INTER-LACE
WIDE Sawtooth Gen.
WIDE Parabola Gen.
ACC
TOT
ACC DET
KILLER DET
DEM
APC
PAL/ NTSC
PAL ID
fsc ID
HUE
VCO
DEM AXIS
I REF
Y/C MIX
YS SW
YS/YM SW
PIC
OSD MIX
D-COL y
BRT
GB DRV
CUT OFF
BLK
COLOR &AXIS
CLP
CLP
DIG
HV COMP
ABL
AKB

J BOARD IC8200 MSP3410D-QA-B4

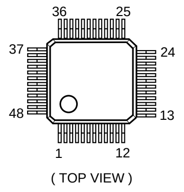

65
3
68
1
5
4
7
6
SBUS Interface
I2C Interface
DEMODULATOR
DFP
DENT
A/D
A/D
D/A
D/A
D/A
D/A
D/A
D/A
SCART Switching Facilities
25
23
28
31
30
34
33
37
36
56
57
59
60
47
48
50
51

5-4 SEMICONDUCTORS

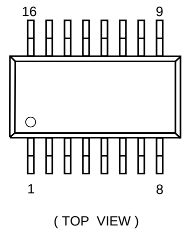
BA7046F
BA7046F-T1
LM393PS-E20
MB3793-42NF
MB3793-42NF-ER
NJM2240M
NJM2240M(TE2)
NJM3404AD


8
5
1
4
(TOP VIEW)

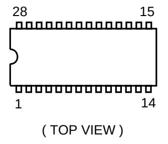
CXA1855Q-T6


36
25
37
24
48
13
1
12
(TOP VIEW)

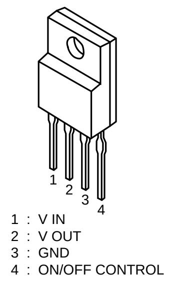
CXA1875AM-T4
HE4094BT
MC14052BDR2
MC74F157ADR2
SN74LS221D
74HCT4046AD/S470


16
9
1
8
(TOP VIEW)

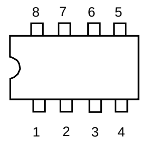
CXD2053S
TDA4780/V3


28
15
1
14
(TOP VIEW)

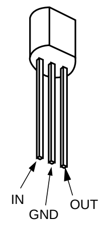
KA78R05TU
KA78R09TU
KA78R33TU


1
2
3
4
1 : V IN
2 : V OUT
3 : GND
4 : ON/OFF CONTROL

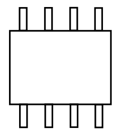
CAD005AD
LM358
LM393N
M5216P
M24C32-BN6
ST24C16FB6
TDA2822M
UPC393C



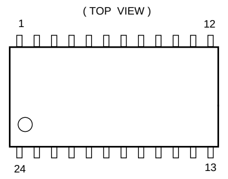
LM78L05ACZ
LM78L12ACZ
L78L05ACZ-AP
L78L12ACZ-AP



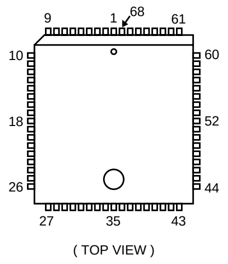
MB3793-42PNF-ER



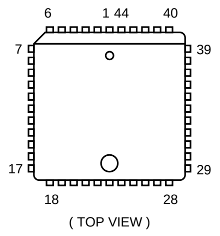
MB88141PF-ER


(TOP VIEW)
1
12
24
13

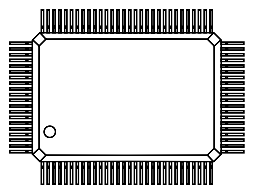
MSP3410D-QA-B4
SAA7185WP
SDA5273P-C134-GEG
SDA5275


9
1
68
61
10
60
18
52
26
44
27
35
43
(TOP VIEW)

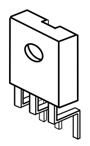
M27C800-100K1


6
1 44
40
7
39
17
29
18
28
(TOP VIEW)

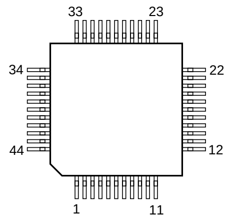
MSM65355GS
SAB-C161R1-LM



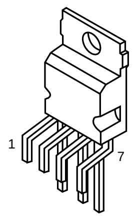
SBX1981-51



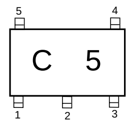
SDA9361


33
23
34
22
44
12
1
11

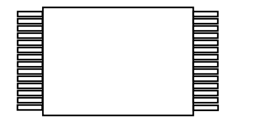
STV9379



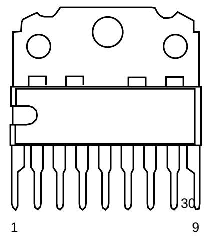
TC4S69F



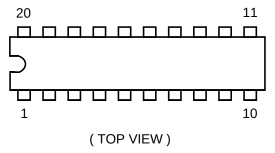
TC55257DFTL-70V-EL



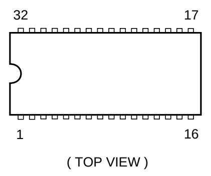
TDA6111Q/N4



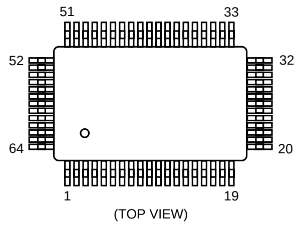
TDA7309D013TR


20
11
1
10
(TOP VIEW)

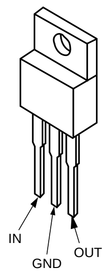
SDA9288X-B121
TDA9143/N2
TDA9144/N2
TDA9170T
MSM534031E3Y-Z


32
17
1
16
(TOP VIEW)

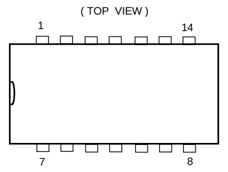
TDA9320H-N1-518


51
33
52
32
64
20
1
19
(TOP VIEW)

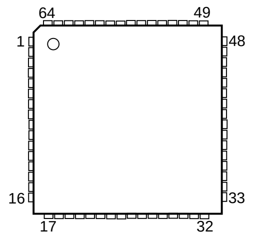
TEA6422DT



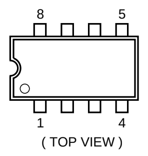
TLC2933


(TOP VIEW)
1
14
7
8

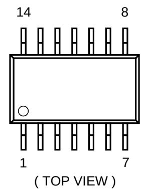
TLC5733A


64
49
1
48
16
33
17
32

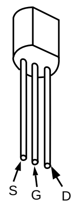
TOP209P


8
5
1
4
(TOP VIEW)

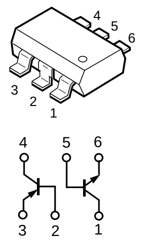
U2860B-BFPG3
74LVC08D


14
8
1
7
(TOP VIEW)

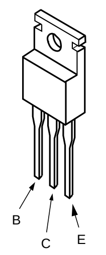
BC546B
BC556B



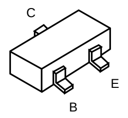
IMZ1A-T109


4
5
6
3
2
1
4
5
6
3
2
1

IRF614
IRF620



DTA144EK	DTC144EK
DTA144EK-T146	DTC144EK-T146
DTC114EK	2SA1037K-T-146-R
DTC114YKA-T146	2SA1162-G
DTC123EK	2SC2412K-QR
DTC123EK-T146	2SC2412K-T-146-R
DTC124EKA-T146	



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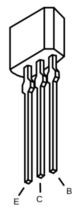
DTA144ESA-TP	2SA933AS-QRT
DTC114ESA-TP	2SA933S-RT
DTC144ESA-TP	2SC1740S-RT
2SA1175-HFE	2SC2785-HFE
2SA733-K	



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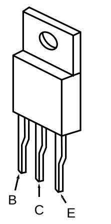

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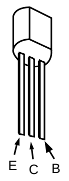

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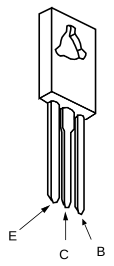

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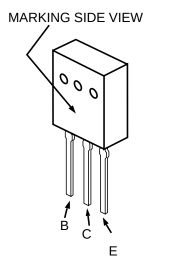
MARKING SIDE VIEW
B
C
E

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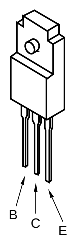

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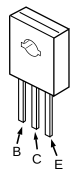

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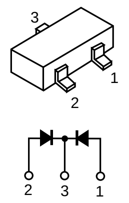

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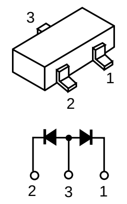

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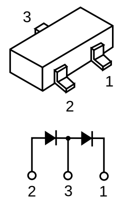

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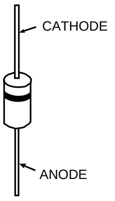
EL1Z
GP08D
GP08DPKG23
R2K-V1
RGP02-20EG23
RGP10GPKG23
RGP15GPKG23
S2LA20F
1SS133T-77
1SS83
1SS83TD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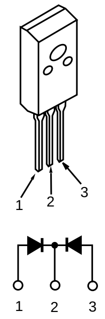
D10SC6M



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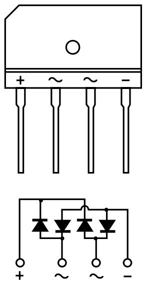

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ERA82-004TP1
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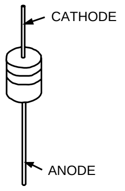
MTZJ-T-77-15
MTZJ-T-77-2.2A
MTZJ-T-77-3-3B
MTZJ-T-77-3.6A
MTZJ-T-77-4.7B
MTZJ-T-77-5.6B
MTZJ-T-77-6.8
MTZJ-T-77-7.5B
MTZJ-T-77-9.1
MTZJ-T-77-12
MTZJ-T-77-22
MTZJ-T-77-18B
MTZJ-33C
RD5.6ESB2
RD9.1ESB2
PGKE200AG23
1SS119-25
1SS119-25TD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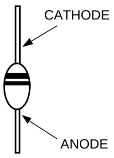
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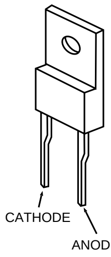
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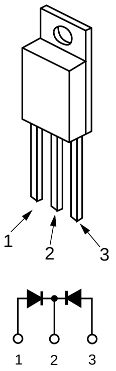
ESAC39M-06CF38



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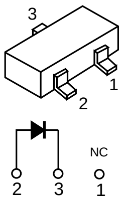
MA3033L-TX
MA3056M-TX
MA3062M-TX
MA3030-H-(TX)



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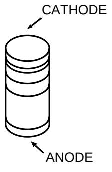
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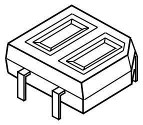

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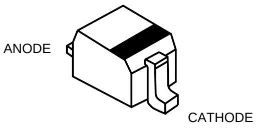
RD12SB2
UDZ-TE-17-3.9B
UDZ-TE-17-4.7B
UDZS-TE-17-5.6B
UDZ-TE-17-6.2B
UDZ-TE-17-6.8B
UDZ-TE-17-8.2B
UDZ-TE-12B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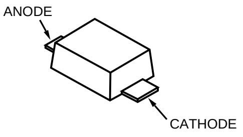
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CATHODE

SECTION 6
EXPLODED VIEWS

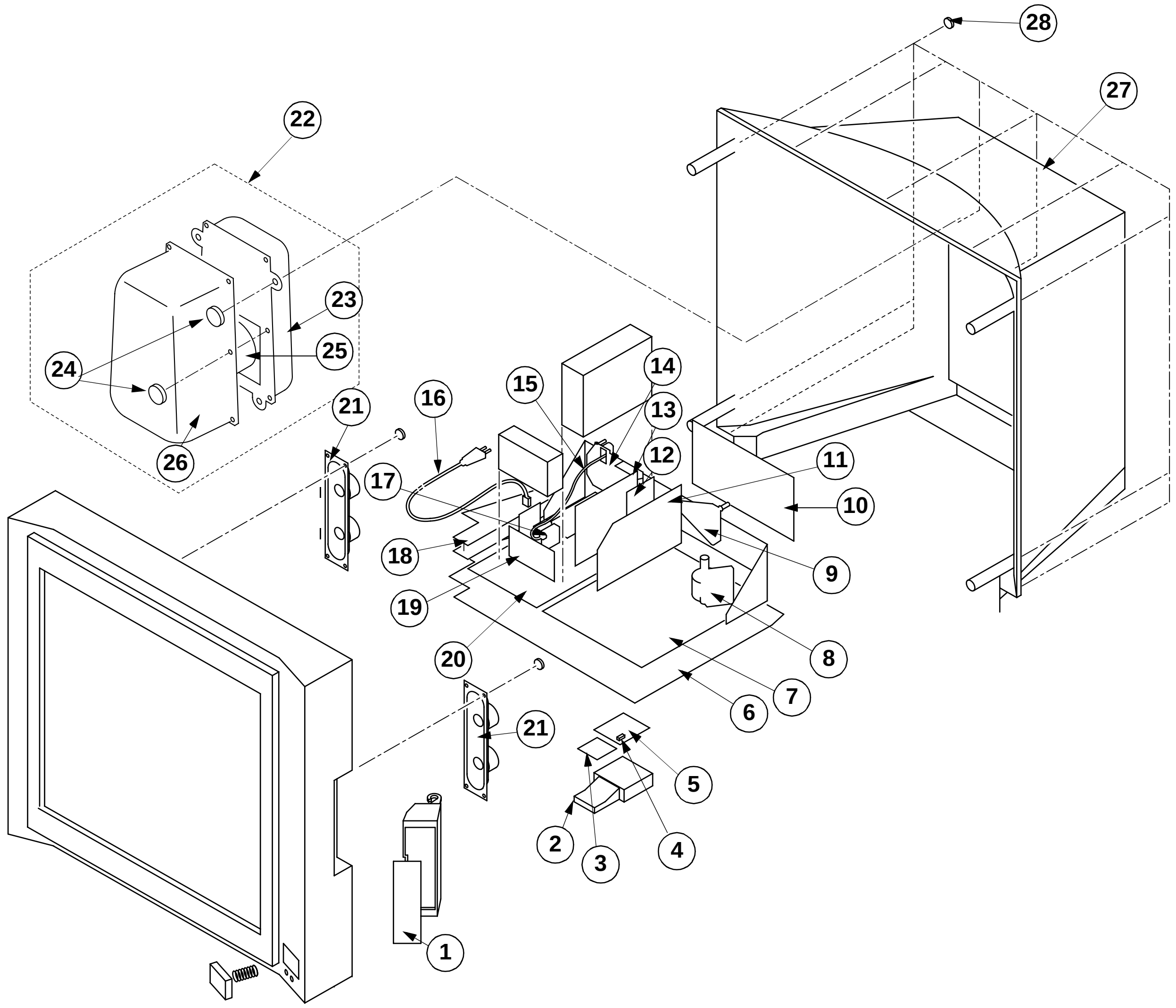
Note : Les composants indentifies par une trame et par une marque ⚠ sonte d'une importance critique pour la securite. Ne les remplacer que par des pieces du numero specifie.

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

NOTE :

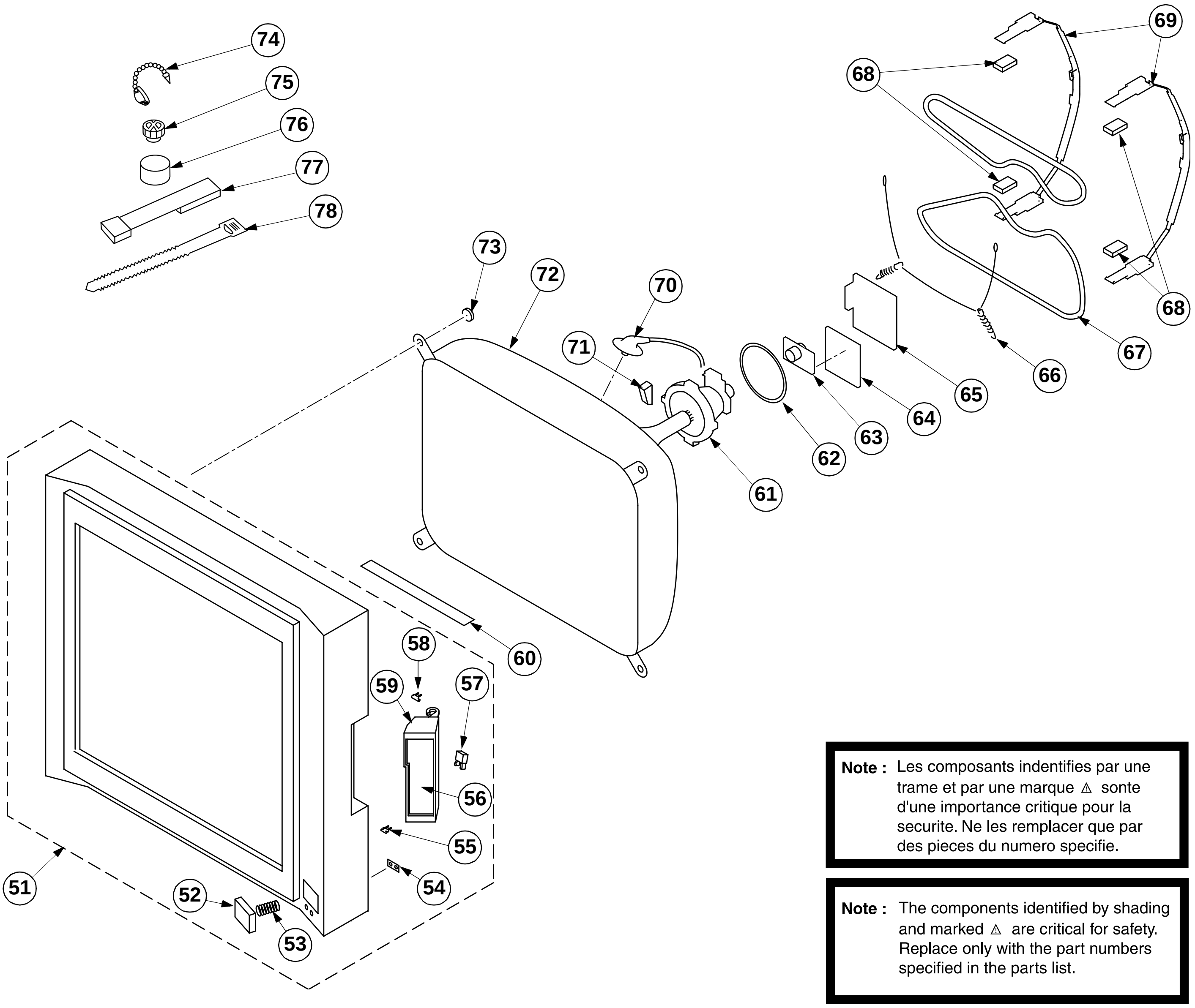
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

6-1. CHASSIS



REF. NO.	PART.NO	DESCRIPTION	REMARK
1	*A-1646-218-A	H7 BOARD, COMPLETE	
2	*4-205-724-01	F4 BRACKET	
3	*A-1646-217-A	H8 BOARD, COMPLETE	
4	⚠ 1-571-433-21	SWITCH, PUSH (AC POWER)	
5	*A-1624-089-A	F4 BOARD, COMPLETE	
6	*4-205-196-02	MAIN BRACKET	
7	*A-1640-398-A	D BOARD, COMPLETE	
8	⚠ 1-453-340-11	TRANSFORMER ASSY, FLYBACK (NX4522//U214)	
9	*4-204-476-04	BRACKET, J1	
10	*A-1651-137-A	J BOARD, COMPLETE	
11	*A-1640-380-A	D1 BOARD, COMPLETE	
12	*A-1640-381-A	E BOARD, COMPLETE	
13	*A-1620-132-A	B2 BOARD, COMPLETE	
14	*4-204-477-04	BRACKET, J2	
15	1-790-082-11	CABLE, RF	
16	⚠ 1-792-389-11	CORD, POWER	
17	1-693-340-11	TUNER/VIF(FR) (KV-29FX65B)	
	1-693-338-11	TUNER/VIF(AEP) (KV-29FX65E/29FX65K)	
18	*A-1624-086-A	F1 BOARD, COMPLETE	
19	*A-1634-057-A	M1 BOARD, COMPLETE	
20	*A-1632-913-A	A BOARD, COMPLETE (KV-29FX65B)	
	*A-1632-912-A	A BOARD, COMPLETE (KV-29FX65E/29FX65K)	
21	1-529-899-11	SPEAKER (24X4.2CM)	
22	*A-1678-191-A	WOOFER ASSY (SP) 23-26	
23	*4-204-775-01	BAFFLE, WOOFER	
24	7-685-663-71	SCREW +BVTP 4X16 TYPE 2 IT-3	
25	1-529-417-11	SPEAKER (8CM)	
26	*4-204-776-01	BOX, WOOFER	
27	4-205-721-01	REAR COVER	
28	7-685-663-79	SCREW +BVTP 4X16 TYPE 2 IT-3	

6-2. PICTURE TUBE



Note : Les composants indentifies par une trame et par une marque ⚠ sonte d'une importance critique pour la securite. Ne les remplacer que par des pieces du numero specifie.

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

REF. NO.		PART.NO	DESCRIPTION	REMARK
51		X-4200-636-1	BEZNET ASSY 52-59	
52		4-205-720-01	POWER BUTTON	
53		4-204-426-01	SPRING	
54		4-205-726-01	GUIDE, LIGHT	
55		3-022-410-01	DAMPER	
56		4-205-722-01	DOOR	
57		4-047-464-01	CATCHER, PUSH	
58		4-205-725-01	DOOR SPRING	
59		4-205-723-01	DOOR BRACKET	
60		4-204-058-31	SHEET, BLOTTING	
61	⚠	8-451-504-31	DEFLECTION YOKE (Y29RSC-S)	
62		1-452-896-11	COIL, NA ROTATION (RT200)	
63	⚠	8-453-011-11	NECK ASSY, (NA299-M)	
64		*A-1644-108-A	VM BOARD, COMPLETE	
65		*A-1638-139-A	C BOARD, COMPLETE	
66		4-369-318-21	SPRING, TENSION	
67	⚠	1-416-654-11	COIL, DEMAGNETIC	
68		4-203-390-11	CUSHION, DGC	
69		*4-204-768-01	HOLDER, DGC (29″)	
70	⚠	1-251-807-22	CAP ASSY, HIGH-VOLTAGE	
71		3-704-495-01	SPACER, DY	
72	⚠	8-735-053-05	PICTURE TUBE (M68LNH060X)	
73		4-046-765-12	SCREW, TAPPING 7+CROWN WASHER	
74		4-308-870-00	CLIP, LEAD WIRE	
75		1-452-094-00	MAGNET, ROTATABLE DISK; 15MM	
76		1-452-032-00	MAGNET, DISK; 10MM	
77		X-4387-214-1	PERMALLOY ASSY, CORRECTION	
78		3-701-007-00	BAND, BINDING	

SECTION 7
ELECTRICAL PARTS LIST

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Note : Refer to the designated variant parts list when seeking a part indicated by an asterisk (*)

Parts indicated (#) on the Schematic Diagram are not used in this model and therefore do not appear in the Parts List.

The components identified by shading and marked ⚠ are critical for safety
Replace only with the part number specified.

REF. NO. PART.NO DESCRIPTION REMARK

*A-1624-089-A F4 Board, Complete

< CONNECTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
CN7601 ⚠	*1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P	
CN7602 ⚠	*1-580-844-11	PIN, CONNECTOR (POWER)	

< SWITCH >

REF. NO.	PART.NO	DESCRIPTION	REMARK
S7601 ⚠	1-571-433-21	SWITCH, PUSH (AC POWER)	

*A-1646-217-A H8 Board, Complete

REF. NO.	PART.NO	DESCRIPTION	REMARK
	4-203-258-01	HOLDER, LED	

< CAPACITOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
C7150	1-126-969-11	ELECT 220UF	20.00% 50V

< CONNECTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
CN7150	*1-564-519-11	PLUG, CONNECTOR 4P	

< DIODE >

REF. NO.	PART.NO	DESCRIPTION	REMARK
D7150	8-719-081-56	DIODE L-59SRGC-CC	

< IC >

REF. NO.	PART.NO	DESCRIPTION	REMARK
IC7150	8-749-014-59	IC TSOP1740KS1	

< RESISTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
R7150	1-249-409-11	CARBON 220 5%	1/4W
R7151	1-249-411-11	CARBON 330 5%	1/4W

*A-1646-218-A H7 Board, Complete

< CAPACITOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
C7900	1-101-810-00	CERAMIC 100PF	5.00% 500V
C7901	1-101-810-00	CERAMIC 100PF	5.00% 500V
C7903	1-535-143-61	LEAD,JUMPER (5.0MM)	
C7904	1-535-143-61	LEAD,JUMPER (5.0MM)	
C7925	1-137-372-11	MYLAR 0.022UF	5.00% 50V
C7926	1-137-372-11	MYLAR 0.022UF	5.00% 50V

< CONNECTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
CN7902	*1-564-518-11	PLUG, CONNECTOR 3P	
CN7904	*1-564-526-11	PLUG, CONNECTOR 11P	

< SOCKET >

REF. NO.	PART.NO	DESCRIPTION	REMARK
J7900	1-779-947-11	TERMINAL BLOCK, S	
J7925	1-785-448-11	JACK	

< COIL >

REF. NO.	PART.NO	DESCRIPTION	REMARK
L7901	1-535-143-61	LEAD, JUMPER (5.0MM)	
L7902	1-535-143-61	LEAD, JUMPER (5.0MM)	
L7925	1-414-183-41	INDUCTOR 10UH	
L7926	1-414-183-41	INDUCTOR 10UH	

< RESISTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
R7901	1-249-417-11	CARBON 1K 5%	1/4W
R7902	1-247-895-91	CARBON 470K 5%	1/4W
R7903	1-247-895-91	CARBON 470K 5%	1/4W
R7905	1-249-417-11	CARBON 1K 5%	1/4W
R7910	1-249-429-11	CARBON 10K 5%	1/4W
R7911	1-249-425-11	CARBON 4.7K 5%	1/4W
R7912	1-249-429-11	CARBON 10K 5%	1/4W
R7913	1-249-421-11	CARBON 2.2K 5%	1/4W
R7914	1-249-421-11	CARBON 2.2K 5%	1/4W
R7915	1-249-425-11	CARBON 4.7K 5%	1/4W

< SWITCH >

REF. NO.	PART.NO	DESCRIPTION	REMARK
S7900	1-771-947-11	SWITCH, TACTILE	
S7901	1-771-947-11	SWITCH, TACTILE	
S7902	1-771-947-11	SWITCH, TACTILE	

*A-1620-132-A B2 Board, Complete

< CAPACITOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
C3300	1-126-933-11	ELECT 100UF	20.00% 16V
C3301	1-126-933-11	ELECT 100UF	20.00% 16V
C3302	1-126-933-11	ELECT 100UF	20.00% 16V
C3307	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3308	1-126-964-11	ELECT 10UF	20.00% 50V
C3309	1-126-964-11	ELECT 10UF	20.00% 50V
C3310	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3311	1-126-964-11	ELECT 10UF	20.00% 50V
C3312	1-126-964-11	ELECT 10UF	20.00% 50V
C3313	1-163-809-11	CERAMIC CHIP 0.047UF	10.00% 25V
C3314	1-163-809-11	CERAMIC CHIP 0.047UF	10.00% 25V
C3315	1-163-809-11	CERAMIC CHIP 0.047UF	10.00% 25V
C3316	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3319	1-126-964-11	ELECT 10UF	20.00% 50V
C3320	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3321	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3322	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V

B2

REF. NO.	PART.NO	DESCRIPTION	REMARK
C3324	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3325	1-126-964-11	ELECT 10UF	20.00% 50V
C3326	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3327	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3328	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3329	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3330	1-126-964-11	ELECT 10UF	20.00% 50V
C3331	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C3333	1-126-964-11	ELECT 10UF	20.00% 50V
C3335	1-126-964-11	ELECT 10UF	20.00% 50V
C3337	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3339	1-163-231-11	CERAMIC CHIP 15PF	5.00% 50V
C3340	1-163-231-11	CERAMIC CHIP 15PF	5.00% 50V
C3345	1-163-231-11	CERAMIC CHIP 15PF	5.00% 50V
C3346	1-163-231-11	CERAMIC CHIP 15PF	5.00% 50V
C3347	1-163-235-11	CERAMIC CHIP 22PF	5.00% 50V
C3348	1-163-235-11	CERAMIC CHIP 22PF	5.00% 50V
C3351	1-126-964-11	ELECT 10UF	20.00% 50V
C3353	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3354	1-104-664-11	ELECT 47UF	20.00% 16V
C3355	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3356	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3359	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3362	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C3363	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V

< CONNECTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
CN3100	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P	

< FILTER >

REF. NO.	PART.NO	DESCRIPTION	REMARK
FL3300	1-233-736-21	FILTER, EMI	
FL3301	1-233-736-21	FILTER, EMI	
FL3302	1-233-736-21	FILTER, EMI	

< IC >

REF. NO.	PART.NO	DESCRIPTION	REMARK
IC3300	8-759-991-41	IC L78L05ACZ-AP	
IC3301	8-759-669-75	IC TLC2932IPW-E20	
IC3302	8-759-546-03	IC SAA4977H-518	
IC3304	8-759-546-72	IC SAA4956TJ-V1-518	

< COIL >

REF. NO.	PART.NO	DESCRIPTION	REMARK
L3302	1-412-029-11	INDUCTOR CHIP 10UH	
L3303	1-412-029-11	INDUCTOR CHIP 10UH	
L3304	1-412-029-11	INDUCTOR CHIP 10UH	
L3305	1-412-029-11	INDUCTOR CHIP 10UH	
L3306	1-412-029-11	INDUCTOR CHIP 10UH	
L3307	1-412-029-11	INDUCTOR CHIP 10UH	
L3309	1-412-029-11	INDUCTOR CHIP 10UH	
L3313	1-412-029-11	INDUCTOR CHIP 10UH	

< TRANSISTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
Q3300	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q3303	8-729-216-22	TRANSISTOR 2SA1037K-T-146-R	
Q3304	8-729-216-22	TRANSISTOR 2SA1037K-T-146-R	
Q3305	8-729-216-22	TRANSISTOR 2SA1037K-T-146-R	

< RESISTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
R3302	1-216-025-91	RES-CHIP 100 5%	1/10W
R3303	1-216-025-91	RES-CHIP 100 5%	1/10W
R3305	1-216-295-91	SHORT 0	
R3306	1-216-295-91	SHORT 0	
R3307	1-216-295-91	SHORT 0	
R3312	1-216-025-91	RES-CHIP 100 5%	1/10W
R3314	1-216-061-00	RES-CHIP 3.3K 5%	1/10W
R3315	1-216-041-00	RES-CHIP 470 5%	1/10W
R3316	1-216-041-00	RES-CHIP 470 5%	1/10W
R3317	1-216-041-00	RES-CHIP 470 5%	1/10W
R3318	1-216-041-00	RES-CHIP 470 5%	1/10W
R3319	1-216-041-00	RES-CHIP 470 5%	1/10W
R3320	1-216-041-00	RES-CHIP 470 5%	1/10W
R3323	1-216-049-91	RES-CHIP 1K 5%	1/10W
R3324	1-216-071-00	RES-CHIP 8.2K 5%	1/10W
R3325	1-216-049-91	RES-CHIP 1K 5%	1/10W
R3331	1-216-047-91	RES-CHIP 820 5%	1/10W
R3332	1-216-047-91	RES-CHIP 820 5%	1/10W
R3336	1-216-033-00	RES-CHIP 220 5%	1/10W
R3337	1-216-089-91	RES-CHIP 47K 5%	1/10W
R3338	1-412-006-31	INDUCTOR CHIP 10UH	
R3339	1-412-006-31	INDUCTOR CHIP 10UH	
R3341	1-216-041-00	RES-CHIP 470 5%	1/10W
R3342	1-216-051-00	RES-CHIP 1.2K 5%	1/10W
R3343	1-216-051-00	RES-CHIP 1.2K 5%	1/10W
R3344	1-412-006-31	INDUCTOR CHIP 10UH	
R3348	1-216-021-00	RES-CHIP 68 5%	1/10W
R3350	1-216-051-00	RES-CHIP 1.2K 5%	1/10W
R3360	1-216-025-91	RES-CHIP 100 5%	1/10W
R3361	1-216-025-91	RES-CHIP 100 5%	1/10W
R3364	1-216-295-91	SHORT 0	
R3370	1-216-057-00	RES-CHIP 2.2K 5%	1/10W
R3376	1-216-057-00	RES-CHIP 2.2K 5%	1/10W
R3377	1-216-057-00	RES-CHIP 2.2K 5%	1/10W
R3380	1-216-049-91	RES-CHIP 1K 5%	1/10W
R3383	1-216-057-00	RES-CHIP 2.2K 5%	1/10W
R3384	1-216-057-00	RES-CHIP 2.2K 5%	1/10W

The components identified by shading and marked ⚠ are critical for safety
Replace only with the part number specified.

REF. NO.	PART.NO	DESCRIPTION	REMARK
R3385	1-216-033-00	RES-CHIP 220 5%	1/10W
R3389	1-216-049-91	RES-CHIP 1K 5%	1/10W
R3390	1-216-049-91	RES-CHIP 1K 5%	1/10W
R3391	1-216-049-91	RES-CHIP 1K 5%	1/10W
R3392	1-216-025-91	RES-CHIP 100 5%	1/10W
R3393	1-216-025-91	RES-CHIP 100 5%	1/10W
R3394	1-216-049-91	RES-CHIP 1K 5%	1/10W
R3395	1-216-049-91	RES-CHIP 1K 5%	1/10W
R3396	1-216-295-91	SHORT 0	
R3397	1-216-295-91	SHORT 0	
R3398	1-216-049-91	RES-CHIP 1K 5%	1/10W

*A-1624-086-A F1 Board, Complete

REF. NO.	PART.NO	DESCRIPTION	REMARK
	*4-374-846-01	COVER, CAPACITOR, CAP TYPE	

< CAPACITOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
C7626	⚠ 1-136-527-12	FILM 0.47UF	20.00% 300V

< CONNECTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
CN7611	⚠ *1-580-843-11	PIN, CONNECTOR (POWER)	
CN7622	1-695-915-11	TAB (CONTACT)	
CN7633	⚠ *1-580-843-11	PIN, CONNECTOR (POWER)	
CN7655	1-695-915-11	TAB (CONTACT)	

< FUSE >

REF. NO.	PART.NO	DESCRIPTION	REMARK
F7626	⚠ 1-576-232-11	FUSE (H.B.C.) 5A/250V	
	⚠ 1-533-725-11	HOLDER, FUSE (F7626)	

< RESISTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
R7626	⚠ 1-202-719-00	SOLID 1M 20%	1/2W
R7627	⚠ 1-220-797-11	CEMENTED 0.47 5%	10W

< TRANSFORMER >

REF. NO.	PART.NO	DESCRIPTION	REMARK
LF7627	⚠ 1-433-488-11	TRANSFORMER, LINE FILTER	

< VARISTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
VD7626	⚠ 1-803-830-11	VARISTOR (ERZV14D621)	

*A-1632-913-A A Board, Complete (KV-29FX65B)
*A-1632-912-A A Board, Complete (KV-29FX65E/29FX65K)

A Board, Common Parts

REF. NO.	PART.NO	DESCRIPTION	REMARK
	4-382-854-11	SCREW (M3X10), P, SW (+)	

< CAPACITOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
C1100	1-104-664-11	ELECT 47UF	20.00% 25V
C1101	1-126-943-11	ELECT 2200UF	20.00% 25V
C1126	1-162-568-11	CERAMIC CHIP 0.33UF	10.00% 16V
C1127	1-136-175-00	FILM 0.68UF	5.00% 50V
C1128	1-163-135-00	CERAMIC CHIP 560PF	5.00% 50V
C1129	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C1130	1-163-017-00	CERAMIC CHIP 0.0047UF	10.00% 50V
C1131	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C1132	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C1133	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C1134	1-126-961-11	ELECT 2.2UF	20.00% 50V
C1135	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C1136	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C1137	1-126-953-11	ELECT 2200UF	20.00% 35V
C1138	1-126-953-11	ELECT 2200UF	20.00% 35V
C1140	1-111-216-91	ELECT 150UF	20.00% 63V
C1141	1-164-505-11	CERAMIC CHIP 2.2UF	16V
C1142	1-130-777-00	MYLAR 0.1UF	5.00% 63V
C1151	1-162-568-11	CERAMIC CHIP 0.33UF	10.00% 16V
C1152	1-136-175-00	FILM 0.68UF	5.00% 50V
C1153	1-163-135-00	CERAMIC CHIP 560PF	5.00% 50V
C1154	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C1155	1-163-017-00	CERAMIC CHIP 0.0047UF	10.00% 50V
C1156	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C1157	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C1158	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C1159	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C1160	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C1162	1-111-216-91	ELECT 150UF	20.00% 63V
C1163	1-164-505-11	CERAMIC CHIP 2.2UF	16V
C1164	1-130-777-00	MYLAR 0.1UF	5.00% 63V
C1177	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C1178	1-126-964-11	ELECT 10UF	20.00% 50V
C1179	1-126-965-11	ELECT 22UF	20.00% 50V
C1180	1-126-952-11	ELECT 1000UF	20.00% 35V
C1181	1-126-952-11	ELECT 1000UF	20.00% 35V
C1182	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C1183	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V

A

REF. NO.	PART.NO	DESCRIPTION	REMARK
C1184	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C1226	1-104-661-91	ELECT 330UF	20.00% 16V
C1227	1-164-505-11	CERAMIC CHIP 2.2UF	16V
C1326	1-163-059-91	CERAMIC CHIP 0.01UF	10.00% 50V
C1327	1-126-934-11	ELECT 220UF	20.00% 10V
C1328	1-163-117-00	CERAMIC CHIP 100PF	5.00% 50V
C1601	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C1602	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C1603	1-126-933-11	ELECT 100UF	20.00% 16V
C1604	1-126-933-11	ELECT 100UF	20.00% 16V
C1605	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C1607	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C1608	1-126-934-11	ELECT 220UF	20.00% 16V
C1610	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C1611	1-126-933-11	ELECT 100UF	20.00% 16V
C1612	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C1613	1-126-933-91	ELECT 100UF	20.00% 16V
C1615	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C1617	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
		< CONNECTOR >	
CN1111	*1-564-520-11	PLUG, CONNECTOR 5P	
CN1200	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P	
CN1401	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P	
CN1600	1-900-903-64	CONNECTOR ASSY 20P	
CN1601	1-900-903-64	CONNECTOR ASSY 20P	
CN1602	1-900-903-64	CONNECTOR ASSY 20P	
CN1700	*1-564-507-11	PLUG, CONNECTOR 4P	
CN1702	*1-564-506-11	PLUG, CONNECTOR 3P	
CN1703	1-764-334-11	PLUG, CONNECTOR 11P	
CN1801	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P	
CN1802	*1-564-506-11	PLUG, CONNECTOR 3P	
CN1901	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P	
CN1902	*1-564-507-11	PLUG, CONNECTOR 4P	
CN1904	*1-564-506-11	PLUG, CONNECTOR 3P	
CN1988	*1-564-507-11	PLUG, CONNECTOR 4P	
		< DIODE >	
D1100	8-719-914-43	DIODE DAN202K-T-146	
D1101	8-719-914-44	DIODE DAP202K-T-146	
D1102	8-719-914-43	DIODE DAN202K-T-146	
D1103	8-719-914-43	DIODE DAN202K-T-146	
D1104	8-719-914-43	DIODE DAN202K-T-146	
D1201	8-719-976-96	DIODE UDZ-TE-17-4.7B	
D1401	8-719-056-82	DIODE UDZ-TE-17-6.2B	
D1402	8-719-056-82	DIODE UDZ-TE-17-6.2B	
D1405	8-719-914-44	DIODE DAP202K-T-146	
D1406	8-719-914-43	DIODE DAN202K-T-146	

REF. NO.	PART.NO	DESCRIPTION	REMARK
D1407	8-719-069-55	DIODE UDZS-TE17-5.6B	
D1408	8-719-069-55	DIODE UDZS-TE17-5.6B	
D1626	8-719-914-43	DIODE DAN202K-T-146	
D1627	8-719-914-43	DIODE DAN202K-T-146	
D1629	8-719-914-43	DIODE DAN202K-T-146	
		< FERRITE BEAD >	
FB1126	1-410-397-21	FERRITE 1.1UH	
FB1127	1-410-397-21	FERRITE 1.1UH	
FB1151	1-410-397-21	FERRITE 1.1UH	
FB1152	1-410-397-21	FERRITE 1.1UH	
FB1901	1-414-553-11	FERRITE 0UH	
FB1903	1-414-553-11	FERRITE 0UH	
FB1904	1-414-553-11	FERRITE 0UH	
FB1905	1-414-553-11	FERRITE 0UH	
FB1906	1-414-553-11	FERRITE 0UH	
FB1907	1-414-553-11	FERRITE 0UH	
		< IC >	
IC1126	8-759-544-25	IC TDA7482	
IC1151	8-759-544-25	IC TDA7482	
IC1176	8-759-333-24	IC LM1876TF	
IC1400	8-752-072-94	IC CXA1875AM-T4	
IC1601	8-759-069-28	IC PQ05RF11	
IC1602	8-759-574-76	IC KA78R05-SYDTU	
IC1604	8-759-054-12	IC PQ09RF11	
IC1605	8-759-069-28	IC PQ05RF11	
		< COIL >	
L1126	1-416-857-11	INDUCTOR 65UH	
L1127	1-414-158-11	INDUCTOR 2.2UH	
L1128	1-414-158-11	INDUCTOR 2.2UH	
L1151	1-416-857-11	INDUCTOR 65UH	
L1152	1-414-158-11	INDUCTOR 2.2UH	
L1153	1-414-158-11	INDUCTOR 2.2UH	
L1326	1-414-183-41	INDUCTOR 10UH	
		< TRANSISTOR >	
Q1100	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q1101	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q1201	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q1202	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q1204	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q1226	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q1227	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q1229	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q1326	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q1327	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	

REF. NO.	PART.NO	DESCRIPTION				REMARK
Q1328	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R				
Q1329	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R				
Q1601	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R				
Q1626	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R				
		< RESISTOR >				
JR1203	1-216-296-91	SHORT	0			
JR1601	1-216-296-91	SHORT	0			
R1001	1-216-295-91	SHORT	0			
R1002	1-216-295-91	SHORT	0			
R1003	1-216-295-91	SHORT	0			
R1004	1-216-295-91	SHORT	0			
R1005	1-216-295-91	SHORT	0			
R1006	1-216-295-91	SHORT	0			
R1100	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1101	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	
R1103	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R1104	1-216-296-91	SHORT	0			
R1126	1-216-631-11	METAL CHIP	150	0.5%	1/10W	
R1127	1-216-073-00	RES-CHIP	10K	5%	1/10W	
R1128	1-216-041-00	RES-CHIP	470	5%	1/10W	
R1151	1-216-631-11	METAL CHIP	150	0.5%	1/10W	
R1152	1-216-075-00	RES-CHIP	12K	5%	1/10W	
R1153	1-216-041-00	RES-CHIP	470	5%	1/10W	
R1176	1-216-063-91	RES-CHIP	3.9K	5%	1/10W	
R1179	1-216-357-00	METAL OXIDE	4.7	5%	1W	
R1180	1-216-081-00	RES-CHIP	22K	5%	1/10W	
R1181	1-216-045-00	RES-CHIP	680	5%	1/10W	
R1182	1-216-081-00	RES-CHIP	22K	5%	1/10W	
R1183	1-216-045-00	RES-CHIP	680	5%	1/10W	
R1184	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R1185	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R1201	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R1202	1-216-083-00	RES-CHIP	27K	5%	1/10W	
R1203	1-216-083-00	RES-CHIP	27K	5%	1/10W	
R1204	1-216-071-00	RES-CHIP	8.2K	5%	1/10W	
R1205	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R1206	1-216-073-00	RES-CHIP	10K	5%	1/10W	
R1208	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R1209	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	
R1210	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R1227	1-216-073-00	RES-CHIP	10K	5%	1/10W	
R1228	1-216-073-00	RES-CHIP	10K	5%	1/10W	
R1229	1-216-073-00	RES-CHIP	10K	5%	1/10W	
R1230	1-216-055-00	RES-CHIP	1.8K	5%	1/10W	
R1232	1-216-295-91	SHORT	0			
R1233	1-216-049-91	RES-CHIP	1K	5%	1/10W	
R1326	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1327	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1328	1-216-073-00	RES-CHIP	10K	5%	1/10W	
R1329	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1330	1-216-041-00	RES-CHIP	470	5%	1/10W	
R1331	1-216-041-00	RES-CHIP	470	5%	1/10W	
R1332	1-216-041-00	RES-CHIP	470	5%	1/10W	
R1333	1-216-075-00	RES-CHIP	12K	5%	1/10W	
R1334	1-216-069-00	RES-CHIP	6.8K	5%	1/10W	
R1335	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1336	1-216-041-00	RES-CHIP	470	5%	1/10W	
R1337	1-216-041-00	RES-CHIP	470	5%	1/10W	
R1338	1-216-001-00	RES-CHIP	10	5%	1/10W	
R1339	1-216-041-00	RES-CHIP	470	5%	1/10W	
R1340	1-216-043-91	RES-CHIP	560	5%	1/10W	
R1342	1-216-073-00	RES-CHIP	10K	5%	1/10W	
R1403	1-216-295-91	SHORT	0			
R1404	1-216-295-91	SHORT	0			
R1405	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1407	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1408	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1409	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1410	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1411	1-216-295-91	SHORT	0			
R1412	1-216-295-91	SHORT	0			
R1601	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	
R1602	1-216-691-11	METAL CHIP	47K	0.5%	1/10W	
R1603	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1605	1-216-049-91	RES-CHIP	1K	5%	1/10W	
R1609	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R1610	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	
R1616	1-216-304-11	RES-CHIP	3.3	5%	1/10W	
R1617	1-216-304-11	RES-CHIP	3.3	5%	1/10W	
R1618	1-216-295-91	SHORT	0			
R1621	1-216-027-00	RES-CHIP	120	5%	1/10W	
R1622	1-216-029-00	RES-CHIP	150	5%	1/10W	
R1623	1-216-033-00	RES-CHIP	220	5%	1/10W	
R1625	1-216-295-91	SHORT	0			

A Board, Variant Parts KV-29FX65B/29FX65E/29FX65K

< TUNER >

TU1326	1-693-340-11	TUNER/VIF	(KV-29FX65B)
	1-693-338-11	TUNER/VIF	(KV-29FX65E/29FX65K)

M1

*A-1634-057-A M1 Board, Complete

< CAPACITOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
C9100	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C9101	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C9102	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C9104	1-104-664-11	ELECT 47UF	20.00% 25V
C9105	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C9110	1-165-321-11	CERAMIC CHIP 0.68UF	10.00% 16V
C9111	1-164-157-11	CERAMIC CHIP 0.068UF	10.00% 25V
C9112	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C9113	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C9114	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C9115	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C9117	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C9118	1-104-664-11	ELECT 47UF	20.00% 25V
C9119	1-163-259-91	CERAMIC CHIP 220PF	5.00% 50V
C9121	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C9122	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C9123	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C9124	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C9125	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C9126	1-163-105-00	CERAMIC CHIP 33PF	5.00% 50V
C9127	1-163-105-00	CERAMIC CHIP 33PF	5.00% 50V
C9128	1-163-105-00	CERAMIC CHIP 33PF	5.00% 50V
C9129	1-163-105-00	CERAMIC CHIP 33PF	5.00% 50V
C9130	1-163-105-00	CERAMIC CHIP 33PF	5.00% 50V
C9131	1-163-105-00	CERAMIC CHIP 33PF	5.00% 50V
C9132	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C9400	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C9500	1-104-664-11	ELECT 47UF	20.00% 25V
C9502	1-104-664-11	ELECT 47UF	20.00% 25V
C9503	1-126-964-11	ELECT 10UF	20.00% 50V
C9504	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C9505	1-104-665-11	ELECT 100UF	20.00% 25V
C9506	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C9507	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C9508	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C9509	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C9510	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C9511	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C9512	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C9513	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C9514	1-163-235-11	CERAMIC CHIP 22PF	5.00% 50V
C9515	1-163-235-11	CERAMIC CHIP 22PF	5.00% 50V
C9516	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C9517	1-163-009-11	CERAMIC CHIP 0.001UF	10.00% 50V
C9518	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C9519	1-126-964-11	ELECT 10UF	20.00% 50V
C9520	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V

< CONNECTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
CN9101	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P	

< DIODE >

REF. NO.	PART.NO	DESCRIPTION	REMARK
D9100	8-719-988-61	DIODE 1SS355TE-17	
D9101	8-719-988-61	DIODE 1SS355TE-17	
D9102	8-719-988-61	DIODE 1SS355TE-17	
D9103	8-719-988-61	DIODE 1SS355TE-17	
D9104	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D9105	8-719-914-43	DIODE DAN202K-T-146	
D9107	8-719-025-31	DIODE 02CZ5.6-TE85L	

< FILTER >

REF. NO.	PART.NO	DESCRIPTION	REMARK
FL9101	1-236-071-11	ENCAPSULATED COMPONENT	
FL9500	1-236-071-11	ENCAPSULATED COMPONENT	
FL9501	1-236-071-11	ENCAPSULATED COMPONENT	

< IC >

REF. NO.	PART.NO	DESCRIPTION	REMARK
IC9100	8-759-988-13	IC LM393PS-E20	
IC9104	8-759-259-18	IC MB3793-42PNF-ER	
IC9105	8-759-686-50	IC SAB-C161P1-LM	
IC9107	8-759-395-27	IC TC55257DFTL-70V-EL	
IC9108	8-759-564-06	IC M24C32-MN6T	
IC9109	8-759-598-02	IC M27C800-100K1-AE520	
IC9110	8-759-559-96	IC HEF4094BT	
IC9500	8-759-991-85	IC 74F003JX	
IC9501	8-759-666-17	IC MSM5116400D-60SJR1	
IC9502	8-759-665-84	IC SDA5275-3PC02-22	

< COIL >

REF. NO.	PART.NO	DESCRIPTION	REMARK
L9400	1-412-029-11	INDUCTOR CHIP 10UH	
L9401	1-412-029-11	INDUCTOR CHIP 10UH	

< TRANSISTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
Q9100	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q9101	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q9102	8-729-216-22	TRANSISTOR 2SA1037K-T-146-R	
Q9103	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q9105	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q9106	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q9107	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q9108	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q9109	8-729-027-46	TRANSISTOR DTC114YKA-T146	

REF. NO.	PART.NO	DESCRIPTION	REMARK
Q9110	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q9500	8-729-216-22	TRANSISTOR 2SA1037K-T-146-R	
Q9501	8-729-216-22	TRANSISTOR 2SA1037K-T-146-R	
Q9502	8-729-216-22	TRANSISTOR 2SA1037K-T-146-R	
Q9503	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q9504	1-801-806-11	TRANSISTOR DTC144EKA-T146	
	< RESISTOR >		
R9100	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R9101	1-216-033-00	RES-CHIP 220 5% 1/10W	
R9102	1-216-033-00	RES-CHIP 220 5% 1/10W	
R9103	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9104	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R9105	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R9106	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R9107	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9108	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9109	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R9110	1-216-081-00	RES-CHIP 22K 5% 1/10W	
R9111	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9112	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9113	1-216-033-00	RES-CHIP 220 5% 1/10W	
R9114	1-216-083-00	RES-CHIP 27K 5% 1/10W	
R9115	1-216-081-00	RES-CHIP 22K 5% 1/10W	
R9116	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R9117	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R9119	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R9120	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R9121	1-216-017-91	RES-CHIP 47 5% 1/10W	
R9122	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R9123	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R9127	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R9128	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R9135	1-216-295-91	SHORT 0	
R9138	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R9140	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R9141	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R9142	1-216-041-00	RES-CHIP 470 5% 1/10W	
R9143	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R9144	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R9145	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R9146	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R9147	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R9148	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R9149	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9150	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9151	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9153	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9159	1-216-069-00	RES-CHIP 6.8K 5% 1/10W	
R9161	1-216-069-00	RES-CHIP 6.8K 5% 1/10W	
R9162	1-216-069-00	RES-CHIP 6.8K 5% 1/10W	
R9164	1-216-069-00	RES-CHIP 6.8K 5% 1/10W	
R9166	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R9168	1-216-069-00	RES-CHIP 6.8K 5% 1/10W	
R9172	1-216-069-00	RES-CHIP 6.8K 5% 1/10W	
R9173	1-216-295-91	SHORT 0	
R9174	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9175	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9176	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9177	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9178	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9179	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R9184	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9185	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9186	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9187	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R9188	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R9189	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9191	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9192	1-216-025-91	RES-CHIP 100 5% 1/10W	
R9193	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R9194	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R9195	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R9196	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R9197	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R9500	1-216-295-91	SHORT 0	
R9501	1-216-295-91	SHORT 0	
R9502	1-216-295-91	SHORT 0	
R9504	1-216-041-00	RES-CHIP 470 5% 1/10W	
R9505	1-216-051-00	RES-CHIP 1.2K 5% 1/10W	
R9506	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R9507	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R9508	1-216-017-91	RES-CHIP 47 5% 1/10W	
R9509	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R9510	1-216-017-91	RES-CHIP 47 5% 1/10W	
R9511	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R9512	1-216-017-91	RES-CHIP 47 5% 1/10W	
R9513	1-216-017-91	RES-CHIP 47 5% 1/10W	
R9514	1-216-017-91	RES-CHIP 47 5% 1/10W	
R9515	1-216-295-91	SHORT 0	
R9516	1-216-295-91	SHORT 0	
R9517	1-216-295-91	SHORT 0	
R9518	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R9519	1-216-039-00	RES-CHIP 390 5% 1/10W	

The components identified by shading and marked ⚠ are critical for safety
Replace only with the part number specified.

REF. NO.	PART.NO	DESCRIPTION	REMARK
R9520	1-216-039-00	RES-CHIP 390	5% 1/10W
R9521	1-216-039-00	RES-CHIP 390	5% 1/10W
R9522	1-216-295-91	SHORT 0	
R9523	1-216-295-91	SHORT 0	
R9524	1-216-295-91	SHORT 0	
R9525	1-216-057-00	RES-CHIP 2.2K	5% 1/10W
R9526	1-216-057-00	RES-CHIP 2.2K	5% 1/10W
R9527	1-216-057-00	RES-CHIP 2.2K	5% 1/10W
R9528	1-216-025-91	RES-CHIP 100	5% 1/10W
R9529	1-216-025-91	RES-CHIP 100	5% 1/10W
R9530	1-216-025-91	RES-CHIP 100	5% 1/10W
R9531	1-216-295-91	SHORT 0	

< CRYSTAL >

REF. NO.	PART.NO	DESCRIPTION	REMARK
X9101	1-781-107-21	VIBRATOR, SERAMIC	
X9500	1-760-551-21	VIBRATOR, CERAMIC	

*A-1638-139-A C Board, Complete

REF. NO.	PART.NO	DESCRIPTION	REMARK
	4-382-854-11	SCREW (M3X10), P, SW (+)	

< CAPACITOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
C5301	1-163-075-00	CERAMIC CHIP 0.047UF	50V
C5302	1-128-528-11	ELECT 470UF	20.00% 16V
C5303	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
C5304	1-107-967-11	ELECT 1UF	20.00% 400V
C5305	1-136-207-11	MYLAR 0.047UF	10.00% 400V
C5306	1-163-017-00	CERAMIC CHIP 0.0047UF	10.00% 50V
C5307	1-163-233-11	CERAMIC CHIP 18PF	5.00% 50V
C5308	1-163-089-00	CERAMIC CHIP 6PF	0.50PF 50V
C5309	1-163-035-00	CERAMIC CHIP 0.047UF	50V
C5310	1-163-113-00	CERAMIC CHIP 68PF	5.00% 50V
C5325	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
C5326	1-163-017-00	CERAMIC CHIP 0.0047UF	10.00% 50V
C5328	1-128-528-11	ELECT 470UF	20.00% 16V
C5329	1-107-967-11	ELECT 1UF	20.00% 400V
C5330	1-136-207-11	MYLAR 0.047UF	10.00% 400V
C5331	1-163-089-00	CERAMIC CHIP 6PF	0.50PF 50V
C5332	1-163-231-11	CERAMIC CHIP 15PF	5.00% 50V
C5333	1-163-035-00	CERAMIC CHIP 0.047UF	50V
C5334	1-163-113-00	CERAMIC CHIP 68PF	5.00% 50V
C5350	1-107-907-11	ELECT 22UF	20.00% 50V
C5351	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
C5352	1-163-017-00	CERAMIC CHIP 0.0047UF	10.00% 50V
C5353	1-163-075-00	CERAMIC CHIP 0.047UF	50V
C5354	1-128-528-11	ELECT 470UF	20.00% 16V
C5355	1-107-967-11	ELECT 1UF	20.00% 400V
C5356	1-136-207-11	MYLAR 0.047UF	10.00% 400V
C5357	1-163-231-11	CERAMIC CHIP 15PF	5.00% 50V
C5358	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
C5359	1-163-035-00	CERAMIC CHIP 0.047UF	50V
C5360	1-163-113-00	CERAMIC CHIP 68PF	5.00% 50V
C5375	1-107-902-11	ELECT 1UF	20.00% 50V
C5376	1-102-106-00	CERAMIC 100PF	10.00% 50V
C5377	1-104-331-11	CERAMIC 0.0022UF	10.00% 1KV
C5378	1-162-116-00	CERAMIC 680PF	10.00% 2KV
C5379	1-162-114-00	CERAMIC 0.0047UF	2KV
C5380	1-107-652-11	ELECT 10UF	20.00% 250V
C5381	1-117-214-11	CERAMIC 0.001UF	10.00% 2KV
C5382	1-162-114-00	CERAMIC 0.0047UF	2KV

< CONNECTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
CN5400	1-564-511-11	PLUG, CONNECTOR 8P	
CN5511	1-695-915-11	TAB (CONTACT)	
CN5600	1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P	

< DIODE >

REF. NO.	PART.NO	DESCRIPTION	REMARK
D5300	8-719-911-19	DIODE 1SS119-25TD	
D5302	8-719-901-83	DIODE 1SS83TD	
D5325	8-719-911-19	DIODE 1SS119-25TD	
D5327	8-719-901-83	DIODE 1SS83TD	
D5350	8-719-911-19	DIODE 1SS119-25TD	
D5351	8-719-991-33	DIODE 1SS133T-77	
D5353	8-719-901-83	DIODE 1SS83TD	
D5375	8-719-991-33	DIODE 1SS133T-77	
D5376	8-719-991-33	DIODE 1SS133T-77	
D5377	8-719-908-03	DIODE GP08DPKG23	
D5378	8-719-921-88	DIODE MTZJ-T-77-13B	
D5379	8-719-982-96	DIODE MTZJ-T-77-2.2A	
D5380	8-719-982-96	DIODE MTZJ-T-77-2.2A	
D5381	8-719-031-34	DIODE RGP02-20EG23	

< IC >

REF. NO.	PART.NO	DESCRIPTION	REMARK
IC5300	8-759-360-83	IC TDA6111Q/N4	
IC5325	8-759-360-83	IC TDA6111Q/N4	
IC5350	8-759-360-83	IC TDA6111Q/N4	

< SOCKET >

REF. NO.	PART.NO	DESCRIPTION	REMARK
J5375 ⚠	1-540-071-22	SOCKET, CRT	

< COIL >

REF. NO.	PART.NO	DESCRIPTION	REMARK
L5300	1-408-591-11	INDUCTOR 1UH	
L5325	1-408-591-11	INDUCTOR 1UH	
L5350	1-408-591-11	INDUCTOR 1UH	

REF. NO.	PART.NO	DESCRIPTION	REMARK
L5375	1-410-671-31	INDUCTOR 47UH	
L5376	1-532-637-00	LINK, IC 1A/150V	
L5377	1-414-183-41	INDUCTOR 10UH	

< TRANSISTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
Q5300	8-729-255-12	TRANSISTOR 2SC2551O-TPE2	
Q5301	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q5325	8-729-255-12	TRANSISTOR 2SC2551O-TPE2	
Q5326	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q5350	8-729-029-56	TRANSISTOR DTA144ESA-TP	
Q5351	8-729-255-12	TRANSISTOR 2SC2551O-TPE2	
Q5352	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX	
Q5375	8-729-119-78	TRANSISTOR 2SC1740S-RT	
Q5376	8-729-026-39	TRANSISTOR 2SA933AS-RT	

< RESISTOR >

REF. NO.	PART.NO	DESCRIPTION				REMARK
R5300	1-249-417-11	CARBON	1K	5%	1/4W	
R5301	1-247-807-31	CARBON	100	5%	1/4W	
R5302	1-535-143-61	LEAD, JUMPER (5.0MM)				
R5303	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W	
R5304	1-202-557-00	SOLID	220	20%	1/2W	
R5305	1-215-929-11	METAL OXIDE	100K	5%	3W	
R5306	1-249-424-11	CARBON	3.9K	5%	1/4W	
R5307	1-249-433-11	CARBON	22K	5%	1/4W	
R5308	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	
R5309	1-216-658-11	METAL CHIP	2K	0.5%	1/10W	
R5310	1-216-059-00	RES-CHIP	2.7K	5%	1/10W	
R5325	1-249-417-11	CARBON	1K	5%	1/4W	
R5326	1-247-807-31	CARBON	100	5%	1/4W	
R5327	1-535-143-61	LEAD, JUMPER (5.0MM)				
R5328	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W	
R5329	1-202-557-00	SOLID	220	20%	1/2W	
R5330	1-215-929-11	METAL OXIDE	100K	5%	3W	
R5331	1-249-424-11	CARBON	3.9K	5%	1/4W	
R5332	1-249-433-11	CARBON	22K	5%	1/4W	
R5333	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	
R5334	1-216-059-00	RES-CHIP	2.7K	5%	1/10W	
R5335	1-216-658-11	METAL CHIP	2K	0.5%	1/10W	
R5350	1-249-417-11	CARBON	1K	5%	1/4W	
R5351	1-247-807-31	CARBON	100	5%	1/4W	
R5352	1-249-416-11	CARBON	820	5%	1/4W	
R5353	1-249-421-11	CARBON	2.2K	5%	1/4W	
R5354	1-249-418-11	CARBON	1.2K	5%	1/4W	
R5355	1-535-143-61	LEAD, JUMPER (5.0MM)				
R5356	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W	
R5357	1-202-557-00	SOLID	220	20%	1/2W	
R5358	1-215-929-11	METAL OXIDE	100K	5%	3W	
R5359	1-249-433-11	CARBON	22K	5%	1/4W	
R5360	1-249-424-11	CARBON	3.9K	5%	1/4W	
R5361	1-249-431-11	CARBON	15K	5%	1/4W	
R5362	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	
R5363	1-216-059-00	RES-CHIP	2.7K	5%	1/10W	
R5364	1-216-658-11	METAL CHIP	2K	0.5%	1/10W	
R5375	1-249-435-11	CARBON	33K	5%	1/4W	
R5376	1-249-429-11	CARBON	10K	5%	1/4W	
R5377	1-249-430-11	CARBON	12K	5%	1/4W	
R5378	1-249-429-11	CARBON	10K	5%	1/4W	
R5379	1-249-438-11	CARBON	56K	5%	1/4W	
R5380	1-249-433-11	CARBON	22K	5%	1/4W	
R5381	1-216-055-00	RES-CHIP	1.8K	5%	1/10W	
R5382	1-202-549-00	SOLID	100	20%	1/2W	
R5383	1-216-399-00	METAL OXIDE	6.8	5%	3W	
R5384	1-216-399-00	METAL OXIDE	6.8	5%	3W	
R5385	1-202-549-00	SOLID	100	20%	1/2W	
R5386	1-202-884-11	SOLID	820K	20%	1/2W	
R5387	1-202-884-11	SOLID	820K	20%	1/2W	
R5388	1-215-911-11	METAL OXIDE	100	5%	3W	
R5389	1-249-417-11	CARBON	1K	5%	1/4W	

< VARIABLE RESISTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
RV5375	1-241-656-21	RES, ADJ, METAL FILM 110M	
RV5376	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	

*A-1640-380-A D1 Board, Complete

REF. NO.	PART.NO	DESCRIPTION	REMARK
	4-202-554-01	HOLDER, HV CABLE	
	4-382-854-11	SCREW (M3X10), P, SW (+)	

< CAPACITOR >

REF. NO.	PART.NO	DESCRIPTION				REMARK
C6100	1-136-165-00	FILM	0.1UF	5.00%	50V	
C6101	1-136-165-00	FILM	0.1UF	5.00%	50V	
C6102	1-136-165-00	FILM	0.1UF	5.00%	50V	
C6103	1-163-205-00	CERAMIC CHIP	0.001UF	5.00%	50V	
C6104	1-163-205-00	CERAMIC CHIP	0.001UF	5.00%	50V	
C6105	1-126-967-11	ELECT	47UF	20.00%	50V	
C6106	1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V	
C6108	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V	
C6109	1-126-967-11	ELECT	47UF	20.00%	50V	
C6110	1-126-967-11	ELECT	47UF	20.00%	50V	
C6112	1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V	
C6113	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V	
C6114	1-126-964-11	ELECT	10UF	20.00%	50V	
C6115	1-163-005-11	CERAMIC CHIP	470PF	10.00%	50V	
C6116	1-163-275-11	CERAMIC CHIP	0.001UF	5.00%	50V	

D1

REF. NO.	PART.NO	DESCRIPTION	REMARK
C6117	1-163-275-11	CERAMIC CHIP 0.001UF	5.00% 50V
C6119	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C6120	1-163-809-11	CERAMIC CHIP 0.047UF	10.00% 25V
C6121	1-126-964-11	ELECT 10UF	20.00% 50V
C6122	1-126-967-11	ELECT 47UF	20.00% 50V
C6125	1-163-017-00	CERAMIC CHIP 0.0047UF	10.00% 50V
C6126	1-163-809-11	CERAMIC CHIP 0.047UF	10.00% 25V
C6127	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C6128	1-163-017-00	CERAMIC CHIP 0.0047UF	10.00% 50V
C6129	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C6130	1-163-259-91	CERAMIC CHIP 220PF	5.00% 50V
C6131	1-126-964-11	ELECT 10UF	20.00% 50V
C6132	1-163-259-91	CERAMIC CHIP 220PF	5.00% 50V
C6133	1-126-964-11	ELECT 10UF	20.00% 50V
C6134	1-102-935-00	CERAMIC 2PF	0.25PF 50V
C6199	1-163-229-11	CERAMIC CHIP 12PF	5.00% 50V
C6207	1-126-967-11	ELECT 47UF	20.00% 50V
C6208	1-126-967-11	ELECT 47UF	20.00% 50V
C6209	1-163-133-00	CERAMIC CHIP 470PF	5.00% 50V
C6210	1-163-009-11	CERAMIC CHIP 0.001UF	10.00% 50V
C6250	1-104-664-11	ELECT 47UF	20.00% 16V
C6251	1-163-989-11	CERAMIC CHIP 0.033UF	10.00% 25V
C6252	1-163-989-11	CERAMIC CHIP 0.033UF	10.00% 25V
C6253	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C6254	1-136-177-00	FILM 1UF	5.00% 50V
C6255	1-136-177-00	FILM 1UF	5.00% 50V
C6256	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C6257	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C6258	1-163-127-00	CERAMIC CHIP 270PF	5.00% 50V
C6259	1-110-501-11	CERAMIC CHIP 0.33UF	10.00% 16V
C6260	1-104-664-11	ELECT 47UF	20.00% 16V
C6261	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C6262	1-136-165-00	FILM 0.1UF	5.00% 50V
C6263	1-163-109-00	CERAMIC CHIP 47PF	5.00% 50V
C6264	1-126-964-11	ELECT 10UF	20.00% 50V
C6306	1-126-964-11	ELECT 10UF	20.00% 50V
C6307	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C6350	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C6351	1-126-967-11	ELECT 47UF	20.00% 50V
C6353	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C6354	1-136-159-00	FILM 0.033UF	5.00% 50V
C6355	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C6356	1-163-809-11	CERAMIC CHIP 0.047UF	10.00% 25V
C6357	1-136-165-00	FILM 0.1UF	5.00% 50V
C6358	1-104-329-11	CERAMIC CHIP 0.1UF	10.00% 50V
C6359	1-104-329-11	CERAMIC CHIP 0.1UF	10.00% 50V
C6360	1-107-714-11	ELECT 10UF	20.00% 50V

REF. NO.	PART.NO	DESCRIPTION	REMARK
C6361	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C6362	1-164-182-11	CERAMIC CHIP 0.0033UF	10.00% 50V
C6363	1-104-665-11	ELECT 100UF	20.00% 25V
C6364	1-136-347-11	FILM 0.0047UF	5.00% 630V
C6365	1-163-809-11	CERAMIC CHIP 0.047UF	10.00% 25V
C6367	1-104-329-11	CERAMIC CHIP 0.1UF	10.00% 50V
C6368	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C6370	1-136-347-11	FILM 0.0047UF	5.00% 630V
C6373	1-136-153-00	FILM 0.01UF	5.00% 50V
C6374	1-129-716-00	FILM 0.015UF	5.00% 630V
C6375	1-102-110-00	CERAMIC 220PF	10.00% 50V
C6376	1-104-664-11	ELECT 47UF	20.00% 16V
C6377	1-128-551-11	ELECT 22UF	20.00% 25V
C6378	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C6380	1-136-165-00	FILM 0.1UF	5.00% 50V
C6381	1-126-960-11	ELECT 1UF	20.00% 50V
C6385	1-104-664-11	ELECT 47UF	20.00% 25V
C6386	1-104-664-11	ELECT 47UF	20.00% 25V
C6388	1-126-964-11	ELECT 10UF	20.00% 50V
C6389	1-126-964-11	ELECT 10UF	20.00% 50V
C6392	1-104-664-11	ELECT 47UF	20.00% 25V
C6401	1-126-964-11	ELECT 10UF	20.00% 50V
C6402	1-107-714-11	ELECT 10UF	20.00% 50V
C6407	1-136-161-00	FILM 0.047UF	5.00% 50V
C6408	1-136-161-00	FILM 0.047UF	5.00% 50V
C6409	1-126-964-11	ELECT 10UF	20.00% 50V
C6420	1-136-165-00	FILM 0.1UF	5.00% 50V
C6421	1-136-165-00	FILM 0.1UF	5.00% 50V

< CONNECTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
CN6502	*1-564-509-11	PLUG, CONNECTOR 6P	
CN6600	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
CN6601	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P	
CN6622	*1-568-878-81	PLUG, CONNECTOR 3P	
CN6623	*1-564-506-51	PLUG, CONNECTOR 3P	
CN6633	*1-564-506-11	PLUG, CONNECTOR 3P	

< DIODE >

REF. NO.	PART.NO	DESCRIPTION	REMARK
D6102	8-719-914-43	DIODE DAN202K-T-146	
D6104	8-719-914-43	DIODE DAN202K-T-146	
D6105	8-719-914-43	DIODE DAN202K-T-146	
D6107	8-719-914-43	DIODE DAN202K-T-146	
D6108	8-719-921-40	DIODE MTZJ-T-77-4.7B	
D6127	8-719-914-43	DIODE DAN202K-T-146	
D6128	8-719-914-43	DIODE DAN202K-T-146	
D6129	8-719-914-43	DIODE DAN202K-T-146	
D6198	1-535-143-61	LEAD, JUMPER (5.0MM)	

The components identified by shading and marked ⚠ are critical for safety
Replace only with the part number specified.

REF. NO.	PART.NO	DESCRIPTION	REMARK
D6253	8-719-911-19	DIODE 1SS119-25TD	
D6454	1-535-143-61	LEAD, JUMPER (5.0MM)	
D6255	8-719-914-43	DIODE DAN202K-T-146	
D6350	8-719-914-43	DIODE DAN202K-T-146	
D6351	8-719-914-43	DIODE DAN202K-T-146	
D6352	8-719-914-43	DIODE DAN202K-T-146	
D6353	8-719-987-87	DIODE ERA82-004TP1	
D6354	8-719-914-43	DIODE DAN202K-T-146	
D6355	8-719-914-43	DIODE DAN202K-T-146	
D6358	8-719-914-43	DIODE DAN202K-T-146	
D6359	8-719-302-43	DIODE RGP10GPKG23	
D6401	8-719-914-43	DIODE DAN202K-T-146	
D6402	8-719-982-03	DIODE MTZJ-T-77-3.6A	
D6403	8-719-921-63	DIODE MTZJ-T-77-7.5B	
D6404	8-719-914-43	DIODE DAN202K-T-146	
D6405	8-719-921-63	DIODE MTZJ-T-77-7.5B	
		< IC >	
IC6100	8-759-450-95	IC LM393N	
IC6101	8-759-450-95	IC LM393N	
IC6102	8-759-638-79	IC NJM3404AD-W	
IC6103	8-759-450-95	IC LM393N	
IC6250	8-759-595-52	IC CXA8070AP	
IC6251	8-759-903-16	IC LM318P	
IC6302	8-752-072-94	IC CXA1875AM-T4	
IC6350	8-759-008-70	IC LM358N	
IC6351	8-759-450-95	IC LM393N	
IC6352	8-759-450-95	IC LM393N	
IC6353	8-759-231-53	IC L7805CV	
IC6354	8-759-325-48	IC CA0005AD	
IC6355	8-759-008-70	IC LM358N	
IC6356	8-759-822-38	IC LA6510	
		< FILTER >	
LF6350	1-406-989-21	INDUCTOR 10MH	
LF6351	1-406-989-21	INDUCTOR 10MH	
		< IC LINK >	
PS6376 ⚠	1-532-637-00	LINK, IC 1A/150V (ICP-N25)	
		< TRANSISTOR >	
Q6100	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6101	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6102	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6103	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6104	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	

REF. NO.	PART.NO	DESCRIPTION	REMARK
Q6105	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6106	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6107	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6108	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q6110	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q6112	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6113	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6118	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6119	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q6120	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q6122	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q6123	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q6125	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6126	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q6127	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q6128	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6129	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q6201	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6202	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6250	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6251	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6252	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q6253	8-729-045-04	TRANSISTOR 2SC5511	
Q6254	8-729-045-05	TRANSISTOR 2SA2005	
Q6350	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6351	8-729-119-78	TRANSISTOR 2SC1740S-RT	
Q6352	8-729-140-97	TRANSISTOR 2SB734-T-3	
Q6353	8-729-140-97	TRANSISTOR 2SB734-T-3	
Q6354	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6356	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6358	8-729-038-83	TRANSISTOR 2SK2251-01-F19	
Q6401	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q6402	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q6403	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6404	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q6405	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q6455	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q6465	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
		< RESISTOR >	
R6100	1-216-033-00	RES-CHIP 220 5% 1/10W	
R6101	1-216-033-00	RES-CHIP 220 5% 1/10W	
R6102	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6103	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6104	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6105	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R6106	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	

D1

REF. NO.	PART.NO	DESCRIPTION	REMARK
R6107	1-216-659-11	METAL CHIP 2.2K 0.5% 1/10W	
R6108	1-216-659-11	METAL CHIP 2.2K 0.5% 1/10W	
R6109	1-216-683-11	METAL CHIP 22K 0.5% 1/10W	
R6110	1-216-683-11	METAL CHIP 22K 0.5% 1/10W	
R6111	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6112	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6113	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R6114	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R6115	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R6116	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R6117	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R6118	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R6119	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R6120	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6121	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6122	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6123	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R6124	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R6125	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6126	1-216-037-00	RES-CHIP 330 5% 1/10W	
R6127	1-216-663-11	METAL CHIP 3.3K 0.5% 1/10W	
R6128	1-216-691-11	METAL CHIP 47K 0.5% 1/10W	
R6129	1-216-691-11	METAL CHIP 47K 0.5% 1/10W	
R6130	1-218-768-11	METAL CHIP 470K 0.5% 1/10W	
R6131	1-216-037-00	RES-CHIP 330 5% 1/10W	
R6132	1-216-037-00	RES-CHIP 330 5% 1/10W	
R6133	1-216-037-00	RES-CHIP 330 5% 1/10W	
R6135	1-163-021-91	CERAMIC CHIP 0.01UF 10.00% 50V	
R6136	1-216-691-11	METAL CHIP 47K 0.5% 1/10W	
R6137	1-216-691-11	METAL CHIP 47K 0.5% 1/10W	
R6138	1-216-691-11	METAL CHIP 47K 0.5% 1/10W	
R6139	1-216-691-11	METAL CHIP 47K 0.5% 1/10W	
R6140	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6141	1-216-683-11	METAL CHIP 22K 0.5% 1/10W	
R6142	1-216-672-11	METAL CHIP 7.5K 0.5% 1/10W	
R6143	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6144	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R6145	1-216-295-91	SHORT 0	
R6146	1-216-667-11	METAL CHIP 4.7K 0.5% 1/10W	
R6148	1-216-295-91	SHORT 0	
R6149	1-216-025-91	RES-CHIP 100 5% 1/10W	
R6154	1-216-651-11	METAL CHIP 1K 0.5% 1/10W	
R6155	1-216-667-11	METAL CHIP 4.7K 0.5% 1/10W	
R6158	1-216-663-11	METAL CHIP 3.3K 0.5% 1/10W	
R6159	1-216-295-91	SHORT 0	
R6160	1-216-295-91	SHORT 0	
R6161	1-216-673-11	METAL CHIP 8.2K 0.5% 1/10W	

REF. NO.	PART.NO	DESCRIPTION	REMARK
R6162	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R6165	1-216-699-91	METAL CHIP 100K 0.5% 1/10W	
R6168	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R6169	1-216-699-91	METAL CHIP 100K 0.5% 1/10W	
R6170	1-216-037-00	RES-CHIP 330 5% 1/10W	
R6171	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6174	1-216-075-00	RES-CHIP 12K 5% 1/10W	
R6175	1-216-069-00	RES-CHIP 6.8K 5% 1/10W	
R6176	1-216-083-00	RES-CHIP 27K 5% 1/10W	
R6177	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R6179	1-216-295-91	SHORT 0	
R6180	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6182	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R6183	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6186	1-216-061-00	RES-CHIP 3.3K 5% 1/10W	
R6188	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R6189	1-216-051-00	RES-CHIP 1.2K 5% 1/10W	
R6190	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6191	1-215-925-11	METAL OXIDE 22K 5% 3W	
R6192	1-216-665-11	METAL CHIP 3.9K 0.5% 1/10W	
R6194	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R6195	1-216-683-11	METAL CHIP 22K 0.5% 1/10W	
R6196	1-249-377-11	CARBON 0.47 5% 1/4W	
R6198	1-216-081-00	RES-CHIP 22K 5% 1/10W	
R6199	1-216-075-00	RES-CHIP 12K 5% 1/10W	
R6205	1-216-025-91	RES-CHIP 100 5% 1/10W	
R6206	1-216-105-91	RES-CHIP 220K 5% 1/10W	
R6207	1-216-099-00	RES-CHIP 120K 5% 1/10W	
R6208	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R6210	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6211	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R6212	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6215	1-216-683-11	METAL CHIP 22K 0.5% 1/10W	
R6216	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R6217	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R6218	1-216-295-91	SHORT 0	
R6254	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R6255	1-216-061-00	RES-CHIP 3.3K 5% 1/10W	
R6256	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6257	1-216-061-00	RES-CHIP 3.3K 5% 1/10W	
R6258	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6259	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R6260	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R6261	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R6262	1-260-321-71	CARBON 270 5% 1/2W	
R6263	1-216-025-91	RES-CHIP 100 5% 1/10W	
R6264	1-216-025-91	RES-CHIP 100 5% 1/10W	

REF. NO.	PART.NO	DESCRIPTION			REMARK
R6265	1-216-097-91	RES-CHIP	100K	5%	1/10W
R6267	1-216-049-91	RES-CHIP	1K	5%	1/10W
R6268	1-216-081-00	RES-CHIP	22K	5%	1/10W
R6269	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R6270	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R6271	1-216-683-11	METAL CHIP	22K	0.5%	1/10W
R6276	1-216-678-11	METAL CHIP	13K	0.5%	1/10W
R6277	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R6278	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R6279	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R6280	1-212-849-00	FUSIBLE	4.7	5%	1/4W
R6281	1-212-849-00	FUSIBLE	4.7	5%	1/4W
R6282	1-215-886-11	METAL OXIDE	100	5%	2W
R6283	1-216-393-00	METAL OXIDE	2.2	5%	3W
R6284	1-208-848-11	METAL CHIP	560K	0.5%	1/10W
R6285	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R6286	1-216-073-00	RES-CHIP	10K	5%	1/10W
R6287	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R6313	1-216-295-91	SHORT	0		
R6322	1-216-049-91	RES-CHIP	1K	5%	1/10W
R6323	1-216-049-91	RES-CHIP	1K	5%	1/10W
R6324	1-216-025-91	RES-CHIP	100	5%	1/10W
R6325	1-216-025-91	RES-CHIP	100	5%	1/10W
R6350	1-216-089-91	RES-CHIP	47K	5%	1/10W
R6351	1-218-762-11	METAL CHIP	270K	0.5%	1/10W
R6353	1-216-668-11	METAL CHIP	5.1K	0.5%	1/10W
R6355	1-218-774-11	METAL CHIP	820K	0.5%	1/10W
R6356	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R6357	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R6358	1-216-047-91	RES-CHIP	820	5%	1/10W
R6359	1-216-097-91	RES-CHIP	100K	5%	1/10W
R6360	1-216-073-00	RES-CHIP	10K	5%	1/10W
R6361	1-216-097-91	RES-CHIP	100K	5%	1/10W
R6362	1-216-687-11	METAL CHIP	33K	0.5%	1/10W
R6363	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R6364	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R6365	1-216-033-00	RES-CHIP	220	5%	1/10W
R6366	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R6367	1-216-679-11	METAL CHIP	15K	0.5%	1/10W
R6368	1-218-758-11	METAL CHIP	180K	0.5%	1/10W
R6369	1-218-762-11	METAL CHIP	270K	0.5%	1/10W
R6370	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R6371	1-216-473-11	METAL OXIDE	56	5%	3W
R6372	1-216-033-00	RES-CHIP	220	5%	1/10W
R6373	1-216-681-11	METAL CHIP	18K	0.5%	1/10W
R6374	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R6375	1-216-041-00	RES-CHIP	470	5%	1/10W
R6377	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R6378	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R6379	1-216-295-91	SHORT	0		
R6380	1-218-754-11	METAL CHIP	120K	0.5%	1/10W
R6381	1-216-045-00	RES-CHIP	680	5%	1/10W
R6382	1-218-754-11	METAL CHIP	120K	0.5%	1/10W
R6383	1-216-687-11	METAL CHIP	33K	0.5%	1/10W
R6384	1-216-043-91	RES-CHIP	560	5%	1/10W
R6385	1-216-295-91	SHORT	0		
R6386	1-216-699-91	METAL CHIP	100K	0.5%	1/10W
R6387	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R6391	1-249-417-11	CARBON	1K	5%	1/4W
R6394	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R6395	1-216-081-00	RES-CHIP	22K	5%	1/10W
R6397	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R6398	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R6399	1-218-758-11	METAL CHIP	180K	0.5%	1/10W
R6400	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R6401	1-216-295-91	SHORT	0		
R6402	1-216-295-91	SHORT	0		
R6403	1-216-661-11	METAL CHIP	2.7K	0.5%	1/10W
R6404	1-216-683-11	METAL CHIP	22K	0.5%	1/10W
R6405	1-216-683-11	METAL CHIP	22K	0.5%	1/10W
R6409	1-216-025-91	RES-CHIP	100	5%	1/10W
R6410	1-216-073-00	RES-CHIP	10K	5%	1/10W
R6411	1-216-073-00	RES-CHIP	10K	5%	1/10W
R6412	1-216-073-00	RES-CHIP	10K	5%	1/10W
R6413	1-216-679-11	METAL CHIP	15K	0.5%	1/10W
R6414	1-216-683-11	METAL CHIP	22K	0.5%	1/10W
R6415	1-216-683-11	METAL CHIP	22K	0.5%	1/10W
R6416	1-216-683-11	METAL CHIP	22K	0.5%	1/10W
R6418	1-216-091-00	RES-CHIP	56K	5%	1/10W
R6419	1-216-073-00	RES-CHIP	10K	5%	1/10W
R6420	1-216-089-91	RES-CHIP	47K	5%	1/10W
R6421	1-216-637-11	METAL CHIP	270	0.5%	1/10W
R6422	1-216-639-11	METAL CHIP	330	0.5%	1/10W
R6423	1-216-657-11	METAL CHIP	1.8K	0.5%	1/10W
R6426	1-216-081-00	RES-CHIP	22K	5%	1/10W
R6427	1-216-081-00	RES-CHIP	22K	5%	1/10W
R6428	1-216-105-91	RES-CHIP	220K	5%	1/10W
R6429	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R6430	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R6431	1-216-121-91	RES-CHIP	1M	5%	1/10W
R6432	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R6433	1-216-073-00	RES-CHIP	10K	5%	1/10W
R6437	1-249-422-11	CARBON	2.7K	5%	1/4W
R6438	1-249-421-11	CARBON	2.2K	5%	1/4W

REF. NO.	PART.NO	DESCRIPTION	REMARK
R6439	1-216-683-11	METAL CHIP 22K 0.5% 1/10W	
R6440	1-216-683-11	METAL CHIP 22K 0.5% 1/10W	
R6441	1-216-675-91	METAL CHIP 10K 0.5% 1/10W	
R6442	1-216-039-00	RES-CHIP 390 5% 1/10W	
R6455	1-216-295-91	SHORT 0	
R6456	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R6457	1-216-075-00	RES-CHIP 12K 5% 1/10W	
R6458	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R6459	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R6460	1-249-393-11	CARBON 10 5% 1/4W	
R6461	1-249-411-11	CARBON 330 5% 1/4W	
R6462	1-249-406-11	CARBON 120 5% 1/4W	
R6463	1-216-095-00	RES-CHIP 82K 5% 1/10W	
R6464	1-216-079-00	RES-CHIP 18K 5% 1/10W	

*A-1640-381-A E Board, Complete

< CAPACITOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
C4316	1-104-664-11	ELECT 47UF 20.00% 25V	
C4317	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4318	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4319	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4320	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4321	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4322	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4324	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4325	1-163-227-11	CERAMIC CHIP 10PF 0.50PF 50V	
C4329	1-126-963-11	ELECT 4.7UF 20.00% 50V	
C4330	1-137-581-11	FILM 0.1UF 5.00% 100V	
C4331	1-126-959-11	ELECT 0.47UF 20.00% 50V	
C4332	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4333	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4334	1-126-967-11	ELECT 47UF 20.00% 50V	
C4336	1-126-967-11	ELECT 47UF 20.00% 50V	
C4338	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4340	1-126-967-11	ELECT 47UF 20.00% 50V	
C4342	1-163-021-91	CERAMIC CHIP 0.01UF 10.00% 50V	
C4343	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4344	1-163-809-11	CERAMIC CHIP 0.047UF 10.00% 25V	
C4345	1-126-967-11	ELECT 47UF 20.00% 50V	
C4346	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4347	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4348	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4349	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4350	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4351	1-163-009-11	CERAMIC CHIP 0.001UF 10.00% 50V	
C4352	1-126-967-11	ELECT 47UF 20.00% 50V	
C4353	1-107-823-11	CERAMIC CHIP 0.47UF 10.00% 16V	
C4354	1-107-823-11	CERAMIC CHIP 0.47UF 10.00% 16V	
C4355	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4356	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4357	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4358	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4359	1-164-161-11	CERAMIC CHIP 0.0022UF 10.00% 50V	
C4360	1-126-963-11	ELECT 4.7UF 20.00% 50V	
C4362	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4363	1-126-967-11	ELECT 47UF 20.00% 50V	
C4364	1-126-967-11	ELECT 47UF 20.00% 50V	
C4366	1-163-059-91	CERAMIC CHIP 0.01UF 10.00% 50V	
C4367	1-104-760-11	CERAMIC CHIP 0.047UF 10.00% 50V	
C4369	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4370	1-126-967-11	ELECT 47UF 20.00% 50V	
C4371	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C4377	1-126-960-11	ELECT 1UF 20.00% 50V	
C4518	1-162-638-11	CERAMIC CHIP 1UF 16V	
C4519	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	

< CONNECTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
CN4101	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P	
CN4500	*1-564-511-11	PLUG, CONNECTOR 8P	
CN4502	*1-564-506-11	PLUG, CONNECTOR 3P	

< DIODE >

REF. NO.	PART.NO	DESCRIPTION	REMARK
D4304	8-719-923-60	DIODE MTZJ-T-77-9.1	
D4305	8-719-923-60	DIODE MTZJ-T-77-9.1	
D4311	8-719-914-43	DIODE DAN202K-T-146	
D4312	8-719-914-43	DIODE DAN202K-T-146	
D4313	8-719-401-63	DIODE MA3062M-TX	

< FERRITE BEAD >

REF. NO.	PART.NO	DESCRIPTION	REMARK
FB4387	1-414-234-22	INDUCTOR CHIP 0UH	
FB4388	1-414-234-22	INDUCTOR CHIP 0UH	
FB4389	1-414-234-22	INDUCTOR CHIP 0UH	

< IC >

REF. NO.	PART.NO	DESCRIPTION	REMARK
IC4301	8-752-090-88	IC CXA2100AQ-TL	

< COIL >

REF. NO.	PART.NO	DESCRIPTION	REMARK
L4301	1-414-183-41	INDUCTOR 10UH	
L4302	1-414-183-41	INDUCTOR 10UH	
L4303	1-414-183-41	INDUCTOR 10UH	
L4304	1-414-183-41	INDUCTOR 10UH	
L4305	1-414-183-41	INDUCTOR 10UH	
L4306	1-414-183-41	INDUCTOR 10UH	
L4308	1-414-186-31	INDUCTOR 33UH	

REF. NO.	PART.NO	DESCRIPTION	REMARK
L4309	1-414-186-31	INDUCTOR 33UH	
		< TRANSISTOR >	
Q4304	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q4307	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q4308	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q4309	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q4310	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q4311	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q4312	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q4313	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q4315	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q4316	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q4317	8-729-900-53	TRANSISTOR DTC114EKA-T146	
		< RESISTOR >	
R4301	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4302	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4303	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4304	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4305	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4306	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4307	1-216-045-00	RES-CHIP 680 5% 1/10W	
R4308	1-216-045-00	RES-CHIP 680 5% 1/10W	
R4309	1-216-045-00	RES-CHIP 680 5% 1/10W	
R4313	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R4314	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R4331	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R4332	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R4333	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R4334	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4335	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4336	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4337	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4339	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R4340	1-216-111-00	RES-CHIP 390K 5% 1/10W	
R4341	1-216-295-91	SHORT 0	
R4343	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4344	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4345	1-216-677-11	METAL CHIP 12K 0.5% 1/10W	
R4346	1-216-681-11	METAL CHIP 18K 0.5% 1/10W	
R4347	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4348	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4350	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4354	1-216-675-91	METAL CHIP 10K 0.5% 1/10W	
R4355	1-216-009-91	RES-CHIP 22 5% 1/10W	
R4356	1-216-009-91	RES-CHIP 22 5% 1/10W	
R4357	1-216-009-91	RES-CHIP 22 5% 1/10W	
R4358	1-216-071-00	RES-CHIP 8.2K 5% 1/10W	
R4359	1-216-041-00	RES-CHIP 470 5% 1/10W	
R4360	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R4361	1-216-133-00	RES-CHIP 3.3M 5% 1/10W	
R4363	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4365	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4366	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4367	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4370	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R4371	1-216-069-00	RES-CHIP 6.8K 5% 1/10W	
R4372	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R4373	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R4374	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R4375	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R4376	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R4377	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R4378	1-216-101-00	RES-CHIP 150K 5% 1/10W	
R4379	1-216-091-00	RES-CHIP 56K 5% 1/10W	
R4380	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R4381	1-216-125-00	RES-CHIP 1.5M 5% 1/10W	
R4382	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R4383	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R4384	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4387	1-216-031-00	RES-CHIP 180 5% 1/10W	
R4388	1-216-031-00	RES-CHIP 180 5% 1/10W	
R4389	1-216-031-00	RES-CHIP 180 5% 1/10W	
R4394	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4395	1-216-295-91	SHORT 0	
R4396	1-216-295-91	SHORT 0	
R4398	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4399	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4401	1-216-107-00	RES-CHIP 270K 5% 1/10W	
R4507	1-216-129-00	RES-CHIP 2.2M 5% 1/10W	
R4518	1-216-025-91	RES-CHIP 100 5% 1/10W	
R4519	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R4520	1-216-295-91	SHORT 0	
R4521	1-216-295-91	SHORT 0	
R4522	1-216-073-00	RES-CHIP 10K 5% 1/10W	
		< CRYSTAL >	
X4300	1-767-127-11	VIBRATOR, CERAMIC	

The components identified by shading and marked ⚠ are critical for safety
Replace only with the part number specified.

*A-1640-398-A D Board, Complete

REF. NO.	PART.NO	DESCRIPTION	REMARK
	4-201-023-01	SPACER, INSULATING	
	4-202-373-01	SPRING, IC	
	4-382-854-11	SCREW (M3X10), P, SW (+)	
	*4-931-401-01	HEAT SINK, V.OUT	
		< CAPACITOR >	
C6600 ⚠	1-113-927-11	CERAMIC 10000PF	20.00% 250V
C6603 ⚠	1-126-933-11	ELECT 100UF	20.00% 16V
C6604 ⚠	1-126-767-11	ELECT 1000UF	20.00% 16V
C6605 ⚠	1-119-888-51	CERAMIC 2200PF	20.00% 250V
C6606 ⚠	1-119-888-51	CERAMIC 2200PF	20.00% 250V
C6607 ⚠	1-136-518-12	FILM 0.33UF	20.00% 300V
C6608 ⚠	1-161-964-91	CERAMIC 0.0047UF	250V
C6609 ⚠	1-161-964-91	CERAMIC 0.0047UF	250V
C6610 ⚠	1-161-964-91	CERAMIC 0.0047UF	250V
C6611 ⚠	1-161-964-91	CERAMIC 0.0047UF	250V
C6612	1-113-927-11	CERAMIC 10000PF	20.00% 250V
C6616	1-164-625-11	CERAMIC 680PF	10.00% 500V
C6617	1-164-625-11	CERAMIC 680PF	10.00% 500V
C6618	1-136-175-00	FILM 0.68UF	5.00% 50V
C6619	1-137-194-81	FILM 0.47UF	5.00% 50V
C6620	1-136-618-11	FILM 0.047UF	5.00% 1.25KV
C6621	1-136-175-00	FILM 0.68UF	5.00% 50V
C6622	1-164-625-11	CERAMIC 680PF	10.00% 500V
C6623	1-137-194-81	FILM 0.47UF	5.00% 50V
C6624	1-126-968-11	ELECT 100UF	20.00% 50V
C6626	1-164-625-11	CERAMIC 680PF	10.00% 500V
C6627	1-164-625-11	CERAMIC 680PF	10.00% 500V
C6628	1-126-936-11	ELECT 3300UF	20.00% 16V
C6629	1-128-548-11	ELECT 4700UF	20.00% 25V
C6630	1-110-626-11	ELECT 330UF	20.00% 160V
C6631	1-126-955-11	ELECT 4700UF	20.00% 35V
C6632	1-126-955-11	ELECT 4700UF	20.00% 35V
C6633	1-126-935-11	ELECT 470UF	20.00% 16V
C6634	1-136-165-00	FILM 0.1UF	5.00% 50V
C6635	1-104-664-11	ELECT 47UF	20.00% 25V
C6636	1-102-129-00	CERAMIC 0.01UF	10.00% 50V
C6637	1-102-129-00	CERAMIC 0.01UF	10.00% 50V
C6638	1-137-368-11	MYLAR 0.0047UF	5.00% 50V
C6639	1-102-228-00	CERAMIC 470PF	10.00% 500V
C6641	1-126-967-11	ELECT 47UF	20.00% 50V
C6642	1-128-551-11	ELECT 22UF	20.00% 25V
C6647	1-104-664-11	ELECT 47UF	20.00% 25V
C6649	1-126-965-11	ELECT 22UF	20.00% 50V
C6651	1-161-964-91	CERAMIC 0.0047UF	250V
C6652	1-107-679-91	ELECT 10UF	20.00% 450V
C6653	1-126-968-11	ELECT 100UF	20.00% 50V
C6654	1-162-117-00	CERAMIC 100PF	10.00% 500V
C6655	1-107-974-11	CERAMIC 47PF	5.00% 2KV
C6656	1-126-967-11	ELECT 47UF	20.00% 50V
C6657	1-126-941-11	ELECT 470UF	20.00% 25V
C6658	1-104-665-11	ELECT 100UF	20.00% 25V
C6659	1-104-665-11	ELECT 100UF	20.00% 25V
C6661	1-117-753-11	ELECT(BLOCK) 470UF	20.00% 450V
C6662	1-136-165-00	FILM 0.1UF	5.00% 50V
C6664	1-136-153-00	FILM 0.01UF	5.00% 50V
C6665	1-136-165-00	FILM 0.1UF	5.00% 50V
C6666	1-136-165-00	FILM 0.1UF	5.00% 50V
C6667	1-126-933-11	ELECT 100UF	20.00% 16V
C6668	1-126-933-11	ELECT 100UF	20.00% 16V
C6669	1-136-165-00	FILM 0.1UF	5.00% 50V
C6670	1-136-165-00	FILM 0.1UF	5.00% 50V
C6671	1-104-664-11	ELECT 47UF	20.00% 16V
C6672	1-104-664-11	ELECT 47UF	20.00% 16V
C6673	1-104-664-11	ELECT 47UF	20.00% 16V
C6677	1-136-165-00	FILM 0.1UF	5.00% 50V
C6679	1-130-495-00	MYLAR 0.1UF	5.00% 50V
C6680	1-137-150-11	MYLAR 0.01UF	5.00% 50V
C6681	1-126-964-11	ELECT 10UF	20.00% 50V
C6682	1-107-679-91	ELECT 10UF	20.00% 450V
C6700	1-102-129-00	CERAMIC 0.01UF	10.00% 50V
C6703	1-128-527-11	ELECT 330UF	20.00% 25V
C6704	1-126-968-11	ELECT 100UF	20.00% 50V
C6705	1-128-527-11	ELECT 330UF	20.00% 25V
C6706	1-137-401-11	MYLAR 0.22UF	10.00% 100V
C6707	1-129-702-00	MYLAR 0.001UF	10.00% 400V
C6708	1-106-220-00	MYLAR 0.1UF	10.00% 100V
C6709	1-102-129-00	CERAMIC 0.01UF	10.00% 50V
C6710	1-130-785-11	MYLAR 0.47UF	10.00% 100V
C6727	1-102-228-00	CERAMIC 470PF	10.00% 500V
C6801	1-104-664-11	ELECT 47UF	20.00% 25V
C6802	1-126-960-11	ELECT 1UF	20.00% 50V
C6803	1-126-960-11	ELECT 1UF	20.00% 50V
C6804	1-102-114-00	CERAMIC 470PF	10.00% 50V
C6805	1-102-114-00	CERAMIC 470PF	10.00% 50V
C6808	1-102-030-00	CERAMIC 330PF	10.00% 500V
C6809	1-102-030-00	CERAMIC 330PF	10.00% 500V
C6810	1-107-368-11	MYLAR 0.047UF	10.00% 200V
C6811	1-107-368-11	MYLAR 0.047UF	10.00% 200V
C6812	1-162-131-11	CERAMIC 220PF	10.00% 2KV
C6813	1-162-558-11	CERAMIC 100PF	10.00% 2KV
C6814	1-117-640-11	FILM 6800PF	3.00% 1.2KV
C6815	1-117-835-11	FILM 6200PF	3.00% 1.5KV

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REF. NO.	PART.NO	DESCRIPTION		REMARK	
C6816	1-130-471-00	MYLAR	0.001UF	5.00%	50V
C6817	1-125-893-11	FILM	680PF	3.00%	1.5KV
C6818	1-125-893-11	FILM	680PF	3.00%	1.5KV
C6819	1-125-893-11	FILM	680PF	3.00%	1.5KV
C6820	1-125-893-11	FILM	680PF	3.00%	1.5KV
C6824	1-107-846-11	FILM	0.1UF	5.00%	250V
C6825	1-115-514-11	FILM	0.22UF	5.00%	250V
C6826	1-115-518-11	FILM	0.47UF	5.00%	250V
C6827	1-115-511-11	FILM	0.12UF	5.00%	250V
C6828	1-127-681-11	FILM MELF	10000PF	2%	100V
C6829	1-127-680-11	FILM MELF	4700PF	2%	100V
C6830	1-107-655-11	ELECT	47UF	20.00%	250V
C6831	1-102-228-00	CERAMIC	470PF	10.00%	500V
C6832	1-126-941-11	ELECT	470UF	20.00%	25V
C6833	1-126-941-11	ELECT	470UF	20.00%	25V
C6834	1-102-228-00	CERAMIC	470PF	10.00%	500V
C6835	1-102-228-00	CERAMIC	470PF	10.00%	500V
C6836	1-123-024-21	ELECT	33UF		160V
C6837	1-106-375-12	MYLAR	0.022UF	10.00%	250V
C6840	1-137-150-11	MYLAR	0.01UF	5.00%	50V
C6841	1-104-664-11	ELECT	47UF	20.00%	16V
C6844	1-115-513-21	FILM	0.18UF	5.00%	250V
C6851	1-162-131-11	CERAMIC	220PF	10.00%	2KV
C6852	1-162-129-00	CERAMIC	150PF	10.00%	2KV
C6853	1-129-898-00	FILM	0.0022UF	5.00%	630V
C6855	1-136-205-11	MYLAR	0.022UF	10.00%	400V
C6856	1-102-030-00	CERAMIC	330PF	10.00%	500V
C6857	1-130-785-11	MYLAR	0.47UF	10.00%	100V
C6861	1-130-471-00	MYLAR	0.001UF	5.00%	50V
C6862	1-130-471-00	MYLAR	0.001UF	5.00%	50V
		< CONNECTOR >			
CN6100	1-785-802-11	PIN, CONNECTOR (WITH PWB) 20P			
CN6101	1-785-802-11	PIN, CONNECTOR (WITH PWB) 20P			
CN6102	1-785-802-11	PIN, CONNECTOR (WITH PWB) 20P			
CN6500	1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P			
CN6600	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P			
CN6611	*1-785-270-12	PIN, DY CONNECTOR (PC BOARD)			
CN6620 ⚠	1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P			
CN6622	1-695-915-11	TAB (CONTACT)			
CN6644 ⚠	*1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P			
CN6655	1-695-915-11	TAB (CONTACT)			
CN6666 ⚠	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P			
CN6700 ⚠	*1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P			

REF. NO.	PART.NO	DESCRIPTION	REMARK
		< DIODE >	
D6600	8-719-911-19	DIODE 1SS119-25TD	
D6601	8-719-063-73	DIODE D1NL20U-TR	
D6602 ⚠	8-719-109-89	DIODE MTZJ-T-77-5.6B	
D6603	8-719-911-19	DIODE 1SS119-25TD	
D6604	8-719-510-53	DIODE D4SB60L-F	
D6605	8-719-991-33	DIODE 1SS133T-77	
D6610	8-719-063-73	DIODE D1NL20U-TR	
D6613	8-719-911-19	DIODE 1SS119-25TD	
D6615	8-719-911-19	DIODE 1SS119-25TD	
D6616	8-719-510-12	DIODE D10SC4M-F	
D6617	8-719-500-71	DIODE D8LC40F	
D6618	8-719-079-50	DIODE RBV-402L	
D6619	8-719-510-12	DIODE D10SC4M-F	
D6620	8-719-510-09	DIODE D10SC6M-F	
D6621	8-719-991-33	DIODE 1SS133T-77	
D6622	8-719-991-33	DIODE 1SS133T-77	
D6623	8-719-911-19	DIODE 1SS119-25TD	
D6624	8-719-991-33	DIODE 1SS133T-77	
D6625	8-719-991-33	DIODE 1SS133T-77	
D6626	8-719-991-33	DIODE 1SS133T-77	
D6627	8-719-983-34	DIODE MTZJ-T-77-33C	
D6628	8-719-109-97	DIODE MTZJ-T-77-6.8	
D6629	8-719-991-33	DIODE 1SS133T-77	
D6630	8-719-991-33	DIODE 1SS133T-77	
D6631 ⚠	8-719-991-33	DIODE 1SS133T-77	
D6651	8-719-068-00	DIODE ERC04-06SE	
D6652	8-719-921-83	DIODE MTZJ-T-77-12A	
D6653	8-719-063-73	DIODE D1NL20U-TR	
D6654	8-719-059-23	DIODE P6KE200AG23	
D6655	8-719-979-64	DIODE UF4005PKG23	
D6656	8-719-063-73	DIODE D1NL20U-TR	
D6658	8-719-068-00	DIODE ERC04-06SE	
D6659	8-719-063-73	DIODE D1NL20U-TR	
D6676	8-719-991-33	DIODE 1SS133T-77	
D6677	8-719-921-40	DIODE MTZJ-T-77-4.7B	
D6678	8-719-921-40	DIODE MTZJ-T-77-4.7B	
D6679	8-719-991-33	DIODE 1SS133T-77	
D6681	8-719-991-33	DIODE 1SS133T-77	
D6700	8-719-200-02	DIODE ERA15-02TP1	
D6701	8-719-110-41	DIODE MTZJ-T-77-15B	
D6803	8-719-200-02	DIODE ERA15-02TP1	
D6804	1-535-143-11	LEAD, JUMPER (10.0MM)	
D6805	8-719-302-43	DIODE RGP10GPKG23	
D6806	8-719-979-85	DIODE RGP15GPKG23	
D6807	8-719-510-73	DIODE S3L20UF4	

The components identified by shading and marked ⚠ are critical for safety
Replace only with the part number specified.

REF. NO.	PART.NO	DESCRIPTION	REMARK
D6808	8-719-510-73	DIODE S3L20UF4	
D6809	8-719-991-33	DIODE 1SS133T-77	
D6810	1-247-895-91	CARBON 470K 5% 1/4W	
D6811	8-719-110-41	DIODE MTZJ-T-77-15B	
D6851	8-719-970-87	DIODE ERA38-06TP1	
D6852	8-719-970-87	DIODE ERA38-06TP1	

< FERRITE BEAD >

REF. NO.	PART.NO	DESCRIPTION	REMARK
FB6602	1-410-396-41	FERRITE 0.45UH	
FB6603	1-410-396-41	FERRITE 0.45UH	

< IC >

REF. NO.	PART.NO	DESCRIPTION	REMARK
IC6600	1-810-051-11	POWER MODULE DM-48	
IC6604	8-729-045-40	TRANSISTOR MX0842A-F	
IC6651	8-759-468-89	IC TOP209P	
IC6652	8-759-394-35	IC BA12T	
IC6653	8-759-054-12	IC PQ09RFU	
IC6654	8-759-574-76	IC KA78R05-SYDTU	
IC6667	8-759-908-15	IC TL431CZ	
IC6676	8-759-908-15	IC TL431CZ	
IC6700	8-759-192-71	IC STV9379	
IC6801	8-759-103-93	IC LM393P	

< COIL >

REF. NO.	PART.NO	DESCRIPTION	REMARK
L6602	1-412-529-11	INDUCTOR 22UH	
L6603	1-412-529-11	INDUCTOR 22UH	
L6604	1-412-525-31	INDUCTOR 10UH	
L6605	1-412-523-41	INDUCTOR 6.8UH	
L6606	1-412-525-31	INDUCTOR 10UH	
L6607	1-412-525-31	INDUCTOR 10UH	
L6651	1-414-183-41	INDUCTOR 10UH	
L6700	1-412-524-11	INDUCTOR 8.2UH	
L6801	1-412-519-11	INDUCTOR 3.3UH	
L6802	1-412-519-11	INDUCTOR 3.3UH	
L6803	1-412-533-21	INDUCTOR 47UH	
L6805	1-408-947-00	INDUCTOR 2.2MH	
L6806	1-535-143-61	LEAD, JUMPER (5.0MM)	
L6807	1-410-397-21	FERRITE 1.1UH	
L6851	1-535-143-61	LEAD JUMPER (5.0MM)	

< FILTER >

REF. NO.	PART.NO	DESCRIPTION	REMARK
LF6603	1-406-659-11	INDUCTOR 10UH	
LF6604	1-406-659-11	INDUCTOR 10UH	
LF6801	1-406-985-11	INDUCTOR 2.2MH	
LF6851	1-406-674-11	INDUCTOR 3.3MH	

< IC LINK >

REF. NO.	PART.NO	DESCRIPTION	REMARK
PS6601 ⚠	1-801-550-21	PROTECTOR, MODULE 2.5A MP250	
PS6602 ⚠	1-801-550-21	PROTECTOR, MODULE 2.5A MP250	
PS6603 ⚠	1-801-549-21	PROTECTOR, MODULE 4.0A MP250	
PS6604 ⚠	1-801-550-21	PROTECTOR, MODULE 2.5A MP250	
PS6605 ⚠	1-801-550-21	PROTECTOR, MODULE 2.5A MP250	

< TRANSISTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
Q6600 ⚠	8-729-046-47	TRANSISTOR KSC2500-BTA	
Q6602	8-729-026-39	TRANSISTOR 2SA933AS-RT	
Q6603	8-729-119-78	TRANSISTOR 2SC1740S-RT	
Q6605	8-729-046-47	TRANSISTOR KSC2500-BTA	
Q6606	8-729-029-56	TRANSISTOR DTA144ESA-TP	
Q6607	8-729-119-78	TRANSISTOR 2SC1740S-RT	
Q6608	8-729-029-66	TRANSISTOR DTC114ESA-TP	
Q6611	8-729-029-66	TRANSISTOR DTC114ESA-TP	
Q6651	8-729-026-39	TRANSISTOR 2SA933AS-RT	
Q6652	8-729-029-86	TRANSISTOR DTC124ESA-TP	
Q6667	8-729-026-39	TRANSISTOR 2SA933AS-RT	
Q6676	8-729-119-78	TRANSISTOR 2SC1740S-RT	
Q6677	8-729-119-78	TRANSISTOR 2SC1740S-RT	
Q6678	8-729-119-78	TRANSISTOR 2SC1740S-RT	
Q6679	8-729-026-39	TRANSISTOR 2SA933AS-RT	
Q6680	8-729-029-66	TRANSISTOR DTC114ESA-TP	
Q6681	8-729-029-66	TRANSISTOR DTC114ESA-TP	
Q6700	8-729-039-68	TRANSISTOR IRF620	
Q6801	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q6802	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q6803	8-729-046-18	TRANSISTOR 2SC5480-01	
Q6804	8-729-046-18	TRANSISTOR 2SC5480-01	
Q6805	8-729-038-83	TRANSISTOR 2SK2251-01-F19	
Q6806	8-729-047-59	TRANSISTOR STP5NB40FP	
Q6807	8-729-030-02	TRANSISTOR DTC144ESA-TP	
Q6851	8-729-043-95	TRANSISTOR 2SC3840K	

< RESISTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
R6601 ⚠	1-202-968-11	CEMENTED 1.2 5% 10W	
R6602	1-249-433-11	CARBON 22K 5% 1/4W	
R6603 ⚠	1-249-430-11	CARBON 12K 5% 1/4W	
R6604 ⚠	1-249-421-11	CARBON 2.2K 5% 1/4W	
R6605	1-249-417-11	CARBON 1K 5% 1/4W	
R6606 ⚠	1-202-968-11	CEMENTED 1.2 5% 10W	
R6608 ⚠	1-220-797-11	CEMENTED 0.47 5% 10W	
R6611	1-260-125-11	CARBON 150K 5% 1/2W	
R6612	1-260-125-11	CARBON 150K 5% 1/2W	
R6613	1-216-369-00	METAL OXIDE 1 5% 2W	

REF. NO.	PART.NO	DESCRIPTION	REMARK
R6614	1-260-125-11	CARBON 150K 5% 1/2W	
R6615	1-260-125-11	CARBON 150K 5% 1/2W	
R6616	1-216-369-00	METAL OXIDE 1 5% 2W	
R6619	1-249-425-11	CARBON 4.7K 5% 1/4W	
R6620	1-249-443-11	CARBON 0.47 5% 1/4W	
R6624	1-249-425-11	CARBON 4.7K 5% 1/4W	
R6625	1-249-429-11	CARBON 10K 5% 1/4W	
R6626	1-247-807-31	CARBON 100 5% 1/4W	
R6627	1-249-429-11	CARBON 10K 5% 1/4W	
R6628	1-260-129-11	CARBON 330K 5% 1/2W	
R6629	1-260-129-11	CARBON 330K 5% 1/2W	
R6630	1-249-417-11	CARBON 1K 5% 1/4W	
R6631	1-249-425-11	CARBON 4.7K 5% 1/4W	
R6632	1-207-905-00	WIREWOUND 0.27 10% 2W	
R6633	1-249-429-11	CARBON 10K 5% 1/4W	
R6635	1-535-143-11	LEAD, JUMPER (10.0MM)	
R6637	1-249-421-11	CARBON 2.2K 5% 1/4W	
R6638	1-247-895-91	CARBON 470K 5% 1/4W	
R6639	1-249-416-11	CARBON 820 5% 1/4W	
R6640	1-249-417-11	CARBON 1K 5% 1/4W	
R6641	1-260-127-11	CARBON 220K 5% 1/2W	
R6642	1-249-389-11	CARBON 4.7 5% 1/4W	
R6643	1-249-417-11	CARBON 1K 5% 1/4W	
R6644	1-249-429-11	CARBON 10K 5% 1/4W	
R6645	1-260-131-11	CARBON 470K 5% 1/2W	
R6646	1-249-429-11	CARBON 10K 5% 1/4W	
R6647	1-249-410-11	CARBON 270 5% 1/4W	
R6648	1-249-433-11	CARBON 22K 5% 1/4W	
R6649	1-215-926-00	METAL OXIDE 33K 5% 3W	
R6651	1-247-791-91	CARBON 22 5% 1/4W	
R6652	1-249-389-11	CARBON 4.7 5% 1/4W	
R6653	1-249-421-11	CARBON 2.2K 5% 1/4W	
R6655	1-249-429-11	CARBON 10K 5% 1/4W	
R6656	1-218-265-11	METAL 8.2M 5% 1W	
R6657	1-215-421-00	METAL 1K 1% 1/4W	
R6666	1-202-933-61	FUSIBLE 0.1 10% 1/2W	
R6667	1-215-441-00	METAL 6.8K 1% 1/4W	
R6668	1-249-428-11	CARBON 8.2K 5% 1/4W	
R6669	1-249-413-11	CARBON 470 5% 1/4W	
R6676	1-249-417-11	CARBON 1K 5% 1/4W	
R6677	1-249-417-11	CARBON 1K 5% 1/4W	
R6678	1-249-417-11	CARBON 1K 5% 1/4W	
R6679	1-215-479-00	METAL 270K 1% 1/4W	
R6681	1-215-467-00	METAL 82K 1% 1/4W	
R6682	1-215-447-00	METAL 12K 1% 1/4W	
R6683	1-215-429-00	METAL 2.2K 1% 1/4W	
R6684	1-247-807-31	CARBON 100 5% 1/4W	
R6685	1-249-417-11	CARBON 1K 5% 1/4W	
R6686	1-215-449-00	METAL 15K 1% 1/4W	
R6687	1-249-431-11	CARBON 15K 5% 1/4W	
R6688	1-249-417-11	CARBON 1K 5% 1/4W	
R6689	1-247-843-11	CARBON 3.3K 5% 1/4W	
R6690	1-249-429-11	CARBON 10K 5% 1/4W	
R6691	1-215-446-00	METAL 11K 1% 1/4W	
R6692	1-215-445-00	METAL 10K 1% 1/4W	
R6700	1-215-441-00	METAL 6.8K 1% 1/4W	
R6701	1-215-437-00	METAL 4.7K 1% 1/4W	
R6702	1-215-441-00	METAL 6.8K 1% 1/4W	
R6703	1-215-437-00	METAL 4.7K 1% 1/4W	
R6704	1-249-383-11	CARBON 1.5 5% 1/4W	
R6705	1-247-791-91	CARBON 22 5% 1/4W	
R6706	1-249-389-11	CARBON 4.7 5% 1/4W	
R6707	1-215-888-00	METAL OXIDE 220 5% 2W	
R6708	1-214-798-21	METAL 1.8 1% 1/2W	
R6709	1-214-798-21	METAL 1.8 1% 1/2W	
R6710	1-247-843-11	CARBON 3.3K 5% 1/4W	
R6711	1-249-418-11	CARBON 1.2K 5% 1/4W	
R6801	1-215-440-00	METAL 6.2K 1% 1/4W	
R6802	1-214-915-00	METAL 120K 1% 1/2W	
R6803	1-249-421-11	CARBON 2.2K 5% 1/4W	
R6804	1-249-408-11	CARBON 180 5% 1/4W	
R6805	1-249-408-11	CARBON 180 5% 1/4W	
R6806	1-249-411-11	CARBON 330 5% 1/4W	
R6807	1-249-411-11	CARBON 330 5% 1/4W	
R6808	1-260-340-11	CARBON 10K 5% 1/2W	
R6809	1-260-340-11	CARBON 10K 5% 1/2W	
R6810	1-215-920-11	METAL OXIDE 3.3K 5% 3W	
R6811	1-216-461-00	METAL OXIDE 5.6K 5% 2W	
R6812	1-215-895-11	METAL OXIDE 3.3K 5% 2W	
R6813	1-215-920-11	METAL OXIDE 3.3K 5% 3W	
R6814	1-215-880-00	METAL OXIDE 10 5% 2W	
R6815	1-215-880-00	METAL OXIDE 10 5% 2W	
R6816	1-216-361-00	METAL OXIDE 0.22 5% 2W	
R6817	1-216-361-00	METAL OXIDE 0.22 5% 2W	
R6818	1-249-405-11	CARBON 100 5% 1/4W	
R6819	1-247-807-31	CARBON 100 5% 1/4W	
R6820	1-535-143-51	LEAD, JUMPER (20.0MM)	
R6821	1-535-143-51	LEAD, JUMPER (20.0MM)	
R6831	1-260-124-11	CARBON 120K 5% 1/2W	
R6832	1-216-434-11	METAL OXIDE 1.8K 5% 1W	
R6833	1-202-972-61	FUSIBLE 1 5% 1/4W	
R6834	1-535-143-21	LEAD, JUMPER (12.5MM)	
R6835	1-260-288-11	CARBON 0.47 5% 1/2W	
R6836	1-249-432-11	CARBON 18K 5% 1/4W	

The components identified by shading and marked ⚠ are critical for safety
Replace only with the part number specified.

REF. NO.	PART.NO	DESCRIPTION			REMARK
R6837	1-215-919-11	METAL OXIDE	2.2K	5%	3W
R6838	1-214-905-11	METAL	47K	1%	1/2W
R6839	1-215-919-11	METAL OXIDE	2.2K	5%	3W
R6840	1-247-843-11	CARBON	3.3K	5%	1/4W
R6842	1-260-123-11	CARBON	100K	5%	1/2W
R6843	1-249-429-11	CARBON	10K	5%	1/4W
R6844	1-249-441-11	CARBON	100K	5%	1/4W
R6845	1-249-433-11	CARBON	22K	5%	1/4W
R6851	1-260-123-11	CARBON	100K	5%	1/2W
R6852	1-260-123-11	CARBON	100K	5%	1/2W
R6853	1-260-123-11	CARBON	100K	5%	1/2W
R6854	1-249-417-11	CARBON	1K	5%	1/4W
R6856	1-216-485-11	METAL OXIDE	5.6K	5%	3W
R6857	1-216-485-11	METAL OXIDE	5.6K	5%	3W
R6858	1-215-922-11	METAL OXIDE	6.8K	5%	3W
R6859	1-215-922-11	METAL OXIDE	6.8K	5%	3W
R6880	1-215-436-00	METAL	4.3K	1%	1/4W
R6885	1-215-493-00	METAL	1M	1%	1/4W
R6886	1-215-477-00	METAL	220K	1%	1/4W
R6887	1-215-461-00	METAL	47K	1%	1/4W
R6888	1-249-441-11	CARBON	100K	5%	1/4W
R6891	1-535-143-61	LEAD, JUMPER (5.0MM)			
R6892	1-535-143-61	LEAD, JUMPER (5.0MM)			
R6895	1-249-443-11	CARBON	0.47	5%	1/4W
R6896	1-249-443-11	CARBON	0.47	5%	1/4W
R6897	1-215-485-00	METAL	470K	1%	1/4W
R6898	1-215-493-00	METAL	1M	1%	1/4W
R6899	1-215-493-00	METAL	1M	1%	1/4W

< RELAY >

REF. NO.	PART.NO	DESCRIPTION
RY6601 ⚠	1-755-266-11	RELAY, AC POWER
RY6602 ⚠	1-755-167-11	RELAY, AC POWER

< TRANSFORMER >

REF. NO.	PART.NO	DESCRIPTION
T6600 ⚠	1-431-616-11	TRANSFORMER, CONVERTER
T6601 ⚠	1-433-516-11	TRANSFORMER, CONVERTER (PIT)
T6651	1-431-732-21	TRANSFORMER, CONVERTER (SRT)
T6801	1-433-489-11	TRANSFORMER, FERRITE (HDT)
T6802	1-433-489-11	TRANSFORMER, FERRITE (HDT)
T6804 ⚠	1-453-340-11	TRANSFORMER ASSY, FLYBACK (NX4522//U214)
T6852	1-433-487-11	TRANSFORMER, FERRITE (DFT)

< THERMISTOR >

REF. NO.	PART.NO	DESCRIPTION
TH6600 ⚠	1-809-827-11	THERMISTOR, POSITIVE
TH6700	1-800-193-00	THERMISTOR

*A-1651-137-A J Board, Complete

< CAPACITOR >

REF. NO.	PART.NO	DESCRIPTION		REMARK
C8105	1-126-933-11	ELECT	100UF	20.00% 16V
C8106	1-126-933-11	ELECT	100UF	20.00% 16V
C8107	1-126-935-11	ELECT	470UF	20.00% 16V
C8108	1-126-933-11	ELECT	100UF	20.00% 16V
C8109	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C8110	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C8111	1-126-933-11	ELECT	100UF	20.00% 16V
C8112	1-107-715-11	ELECT	22UF	20.00% 16V
C8144	1-107-823-11	CERAMIC CHIP	0.47UF	10.00% 16V
C8145	1-107-823-11	CERAMIC CHIP	0.47UF	10.00% 16V
C8200	1-104-664-11	ELECT	47UF	20.00% 16V
C8201	1-163-241-11	CERAMIC CHIP	39PF	5.00% 50V
C8202	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C8203	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C8204	1-164-506-11	CERAMIC CHIP	4.7UF	16V
C8205	1-165-319-11	CERAMIC CHIP	0.1UF	50V
C8208	1-164-506-11	CERAMIC CHIP	4.7UF	16V
C8209	1-163-251-11	CERAMIC CHIP	100PF	5.00% 50V
C8210	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C8211	1-163-243-11	CERAMIC CHIP	47PF	5.00% 50V
C8212	1-163-243-11	CERAMIC CHIP	47PF	5.00% 50V
C8213	1-163-087-00	CERAMIC CHIP	4PF	0.25PF 50V
C8214	1-163-087-00	CERAMIC CHIP	4PF	0.25PF 50V
C8215	1-163-243-11	CERAMIC CHIP	47PF	5.00% 50V
C8216	1-126-933-11	ELECT	100UF	20.00% 16V
C8217	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C8218	1-126-964-11	ELECT	10UF	20.00% 50V
C8219	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C8220	1-126-964-11	ELECT	10UF	20.00% 50V
C8221	1-104-664-11	ELECT	47UF	20.00% 16V
C8222	1-104-664-11	ELECT	47UF	20.00% 16V
C8223	1-104-664-11	ELECT	47UF	20.00% 16V
C8224	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C8225	1-104-664-11	ELECT	47UF	20.00% 16V
C8227	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C8228	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C8229	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C8230	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C8231	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C8232	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C8233	1-104-664-11	ELECT	47UF	20.00% 16V
C8234	1-107-823-11	CERAMIC CHIP	0.47UF	10.00% 16V
C8235	1-107-823-11	CERAMIC CHIP	0.47UF	10.00% 16V
C8236	1-126-933-11	ELECT	100UF	20.00% 16V

REF. NO.	PART.NO	DESCRIPTION	REMARK
C8237	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8238	1-164-505-11	CERAMIC CHIP 2.2UF	16V
C8239	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C8240	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C8241	1-126-964-11	ELECT 10UF	20.00% 50V
C8242	1-104-664-11	ELECT 47UF	20.00% 16V
C8301	1-163-037-11	CERAMIC CHIP 0.022UF	10.00% 50V
C8302	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8303	1-126-933-11	ELECT 100UF	20.00% 16V
C8304	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C8305	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8306	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C8307	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C8308	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C8309	1-126-961-11	ELECT 2.2UF	20.00% 50V
C8311	1-104-664-11	ELECT 47UF	20.00% 16V
C8313	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8314	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8318	1-104-664-11	ELECT 47UF	20.00% 16V
C8321	1-104-664-11	ELECT 47UF	20.00% 16V
C8322	1-163-227-11	CERAMIC CHIP 10PF	0.50PF 50V
C8323	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8324	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8325	1-126-964-11	ELECT 10UF	20.00% 50V
C8326	1-104-664-11	ELECT 47UF	20.00% 16V
C8328	1-104-664-11	ELECT 47UF	20.00% 16V
C8329	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8331	1-216-025-91	RES-CHIP 100	5% 1/10W
C8332	1-216-025-91	RES-CHIP 100	5% 1/10W
C8333	1-216-025-91	RES-CHIP 100	5% 1/10W
C8334	1-216-025-91	RES-CHIP 100	5% 1/10W
C8335	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8336	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8337	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8338	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8345	1-164-346-11	CERAMIC CHIP 1UF	16V
C8346	1-126-963-11	ELECT 4.7UF	20.00% 50V
C8601	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C8602	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C8605	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C8606	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C8607	1-104-664-11	ELECT 47UF	20.00% 16V
C8608	1-104-664-11	ELECT 47UF	20.00% 16V
C8609	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C8610	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C8611	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C8612	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V

REF. NO.	PART.NO	DESCRIPTION	REMARK
C8613	1-104-664-11	ELECT 47UF	20.00% 16V
C8614	1-104-664-11	ELECT 47UF	20.00% 16V
C8804	1-126-933-11	ELECT 100UF	20.00% 16V
C8812	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8814	1-104-664-11	ELECT 47UF	20.00% 25V
C8822	1-126-933-11	ELECT 100UF	20.00% 16V
C8825	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C8826	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C8827	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8828	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8829	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8830	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8831	1-126-964-11	ELECT 10UF	20.00% 50V
C8832	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8833	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8834	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8835	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8836	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8837	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8838	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8839	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C8840	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8841	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8842	1-104-664-11	ELECT 47UF	20.00% 16V
C8843	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8844	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8846	1-126-933-11	ELECT 100UF	20.00% 16V
C8847	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8849	1-164-346-11	CERAMIC CHIP 1UF	16V
C8850	1-164-346-11	CERAMIC CHIP 1UF	16V
C8851	1-126-967-11	ELECT 47UF	20.00% 50V
C8852	1-164-346-11	CERAMIC CHIP 1UF	16V
C8853	1-126-967-11	ELECT 47UF	20.00% 50V
C8854	1-164-346-11	CERAMIC CHIP 1UF	16V
C8855	1-164-346-11	CERAMIC CHIP 1UF	16V
C8856	1-164-346-11	CERAMIC CHIP 1UF	16V
C8857	1-164-346-11	CERAMIC CHIP 1UF	16V
C8858	1-164-346-11	CERAMIC CHIP 1UF	16V
C8859	1-164-346-11	CERAMIC CHIP 1UF	16V
C8860	1-164-346-11	CERAMIC CHIP 1UF	16V
C8861	1-164-346-11	CERAMIC CHIP 1UF	16V
C8862	1-164-346-11	CERAMIC CHIP 1UF	16V
C8863	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8864	1-164-346-11	CERAMIC CHIP 1UF	16V
C8865	1-104-664-11	ELECT 47UF	20.00% 16V
C8866	1-164-346-11	CERAMIC CHIP 1UF	16V
C8867	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V

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REF. NO.	PART.NO	DESCRIPTION	REMARK
C8868	1-126-964-11	ELECT 10UF	20.00% 50V
C8869	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8896	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C8897	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C8898	1-163-227-11	CERAMIC CHIP 10PF	0.50PF 50V
C8899	1-163-227-11	CERAMIC CHIP 10PF	0.50PF 50V
C8900	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C8901	1-163-017-00	CERAMIC CHIP 0.0047UF	10.00% 50V
C8902	1-163-017-00	CERAMIC CHIP 0.0047UF	10.00% 50V
C8903	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C8904	1-163-017-00	CERAMIC CHIP 0.0047UF	10.00% 50V
C8905	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C8906	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C8907	1-163-017-00	CERAMIC CHIP 0.0047UF	10.00% 50V
C8908	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C8909	1-163-017-00	CERAMIC CHIP 0.0047UF	10.00% 50V
C8910	1-163-251-11	CERAMIC CHIP 100PF	5.00% 50V
C8911	1-163-017-00	CERAMIC CHIP 0.0047UF	10.00% 50V
C8914	1-126-933-11	ELECT 100UF	20.00% 16V
C8977	1-163-009-11	CERAMIC CHIP 0.001UF	10.00% 50V
C8978	1-163-009-11	CERAMIC CHIP 0.001UF	10.00% 50V
	< FILTER >		
CF8200	1-409-327-00	TRAP, CERAMIC (6.5MHZ)	
	< CONNECTOR >		
CN8101	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P	
CN8900	1-561-534-41	SOCKET, PIN 21P	
CN8901	1-695-293-11	SOCKET 21P	
CN8902	1-695-293-11	SOCKET 21P	
	< DIODE >		
D8153	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D8200	8-719-158-49	DIODE UDZ-TE-17-12B	
D8201	8-719-158-49	DIODE UDZ-TE-17-12B	
D8202	8-719-158-49	DIODE UDZ-TE-17-12B	
D8203	8-719-158-49	DIODE UDZ-TE-17-12B	
D8801	8-719-158-49	DIODE UDZ-TE-17-12B	
D8802	8-719-158-49	DIODE UDZ-TE-17-12B	
D8803	8-719-158-49	DIODE UDZ-TE-17-12B	
D8804	8-719-158-49	DIODE UDZ-TE-17-12B	
D8805	8-719-158-49	DIODE UDZ-TE-17-12B	
D8806	8-719-158-49	DIODE UDZ-TE-17-12B	
D8807	8-719-158-49	DIODE UDZ-TE-17-12B	
D8808	8-719-158-49	DIODE UDZ-TE-17-12B	
D8809	8-719-158-49	DIODE UDZ-TE-17-12B	
D8810	8-719-158-49	DIODE UDZ-TE-17-12B	
D8811	8-719-158-49	DIODE UDZ-TE-17-12B	
D8812	8-719-158-49	DIODE UDZ-TE-17-12B	
D8813	8-719-158-49	DIODE UDZ-TE-17-12B	
D8814	8-719-158-49	DIODE UDZ-TE-17-12B	
D8900	8-719-056-85	DIODE UDZS-TE-17-8.2B	
D8901	8-719-158-49	DIODE UDZ-TE-17-12B	
D8902	8-719-056-85	DIODE UDZS-TE-17-8.2B	
D8903	8-719-056-85	DIODE UDZS-TE-17-8.2B	
D8904	8-719-056-85	DIODE UDZS-TE-17-8.2B	
D8905	8-719-056-85	DIODE UDZS-TE-17-8.2B	
D8906	8-719-056-85	DIODE UDZS-TE-17-8.2B	
D8907	8-719-158-49	DIODE UDZ-TE-17-12B	
D8908	8-719-056-85	DIODE UDZS-TE-17-8.2B	
D8909	8-719-056-85	DIODE UDZS-TE-17-8.2B	
D8910	8-719-056-85	DIODE UDZS-TE-17-8.2B	
D8911	8-719-056-85	DIODE UDZS-TE-17-8.2B	
D8912	8-719-158-49	DIODE UDZ-TE-17-12B	
D8913	8-719-158-49	DIODE UDZ-TE-17-12B	
D8914	8-719-158-49	DIODE UDZ-TE-17-12B	
D8915	8-719-158-49	DIODE UDZ-TE-17-12B	
	< FILTER >		
FL8200	1-236-071-11	ENCAPSULATED COMPONENT	
FL8201	1-233-764-21	FILTER	
FL8203	1-236-071-11	ENCAPSULATED COMPONENT	
FL8302	1-236-071-11	ENCAPSULATED COMPONENT	
FL8304	1-236-071-11	ENCAPSULATED COMPONENT	
FL8308	1-236-071-11	ENCAPSULATED COMPONENT	
FL8801	1-236-071-11	ENCAPSULATED COMPONENT	
FL8802	1-236-071-11	ENCAPSULATED COMPONENT	
	< IC >		
IC8101	8-759-576-76	IC TDA2822D013TR	
IC8151	8-752-072-94	IC CXA1875AM-T4	
IC8200	8-759-654-42	IC MSP3410D-C5QA-B4	
IC8201	8-759-701-36	IC MC3403NS-E20	
IC8202	8-759-908-15	IC TL431CZ	
IC8301	8-752-096-06	IC CXA2163Q-T6	
IC8302	8-759-485-79	IC TC7SET08FU(TE85R)	
IC8601	8-759-182-88	IC PQ09TZ5U	
IC8602	8-759-576-72	IC LF50CDT-TR	
IC8603	8-759-576-72	IC LF50CDT-TR	
IC8604	8-759-576-72	IC LF50CDT-TR	
IC8801	8-752-096-83	IC CXA2149AQ-TL	
	< SOCKET >		
J8901	1-774-747-11	JACK BLOCK, PIN	

< COIL >

REF. NO.	PART.NO	DESCRIPTION	REMARK
L8150	1-414-757-11	INDUCTOR 100UH	
L8200	1-412-006-31	INDUCTOR CHIP 10UH	
L8201	1-412-064-11	INDUCTOR CHIP 100UH	

< TRANSISTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
Q8100	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q8101	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q8156	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q8157	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q8200	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q8201	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q8202	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q8303	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q8305	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q8306	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q8308	8-729-038-96	TRANSISTOR IMZ1A-T109	
Q8309	8-729-038-96	TRANSISTOR IMZ1A-T109	
Q8310	8-729-038-96	TRANSISTOR IMZ1A-T109	
Q8809	8-729-216-22	TRANSISTOR 2SA1037K-T-146-R	
Q8817	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q8818	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q8819	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q8901	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	
Q8902	8-729-216-22	TRANSISTOR 2SA1037K-T-146-R	

< RESISTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
JR8402	1-216-295-91	SHORT 0	
R8103	1-216-075-00	RES-CHIP 12K 5% 1/10W	
R8104	1-216-075-00	RES-CHIP 12K 5% 1/10W	
R8105	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R8106	1-216-081-00	RES-CHIP 22K 5% 1/10W	
R8107	1-216-081-00	RES-CHIP 22K 5% 1/10W	
R8108	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R8109	1-249-389-11	CARBON 4.7 5% 1/4W	
R8110	1-249-389-11	CARBON 4.7 5% 1/4W	
R8111	1-216-033-00	RES-CHIP 220 5% 1/10W	
R8112	1-216-033-00	RES-CHIP 220 5% 1/10W	
R8115	1-216-029-00	RES-CHIP 150 5% 1/10W	
R8116	1-216-029-00	RES-CHIP 150 5% 1/10W	
R8117	1-216-029-00	RES-CHIP 150 5% 1/10W	
R8118	1-216-029-00	RES-CHIP 150 5% 1/10W	
R8165	1-216-295-91	SHORT 0	
R8167	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8168	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8174	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R8175	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R8176	1-216-295-91	SHORT 0	
R8178	1-216-073-00	RES-CHIP 10K 5% 1/10W	
R8200	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R8201	1-216-295-91	SHORT 0	
R8202	1-216-021-00	RES-CHIP 68 5% 1/10W	
R8203	1-216-069-00	RES-CHIP 6.8K 5% 1/10W	
R8204	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R8205	1-216-069-00	RES-CHIP 6.8K 5% 1/10W	
R8206	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R8208	1-216-037-00	RES-CHIP 330 5% 1/10W	
R8209	1-216-659-11	METAL CHIP 2.2K 0.5% 1/10W	
R8210	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8211	1-216-295-91	SHORT 0	
R8212	1-216-295-91	SHORT 0	
R8213	1-216-295-91	SHORT 0	
R8216	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8217	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8218	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R8219	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8220	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8221	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8222	1-216-295-91	SHORT 0	
R8223	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8224	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8225	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8226	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8227	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8228	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8229	1-216-295-91	SHORT 0	
R8230	1-216-081-00	RES-CHIP 22K 5% 1/10W	
R8231	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8232	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8233	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8234	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8235	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8236	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8237	1-216-043-91	RES-CHIP 560 5% 1/10W	
R8238	1-216-063-91	RES-CHIP 3.9K 5% 1/10W	
R8239	1-216-069-00	RES-CHIP 6.8K 5% 1/10W	
R8240	1-216-651-11	METAL CHIP 1K 0.5% 1/10W	
R8243	1-216-021-00	RES-CHIP 68 5% 1/10W	
R8300	1-216-295-91	SHORT 0	
R8302	1-216-017-91	RES-CHIP 47 5% 1/10W	
R8306	1-216-083-00	RES-CHIP 27K 5% 1/10W	
R8308	1-216-039-00	RES-CHIP 390 5% 1/10W	
R8309	1-216-055-91	RES-CHIP 1.8K 5% 1/10W	

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REF. NO.	PART.NO	DESCRIPTION				REMARK
R8310	1-216-037-00	RES-CHIP	330	5%	1/10W	
R8312	1-216-091-00	RES-CHIP	56K	5%	1/10W	
R8313	1-216-081-00	RES-CHIP	22K	5%	1/10W	
R8314	1-216-295-91	SHORT	0			
R8315	1-216-121-91	RES-CHIP	1M	5%	1/10W	
R8316	1-216-037-00	RES-CHIP	330	5%	1/10W	
R8317	1-216-295-91	SHORT	0			
R8318	1-216-295-91	SHORT	0			
R8319	1-216-295-91	SHORT	0			
R8320	1-216-041-00	RES-CHIP	470	5%	1/10W	
R8322	1-216-049-91	RES-CHIP	1K	5%	1/10W	
R8323	1-216-017-91	RES-CHIP	47	5%	1/10W	
R8324	1-216-041-00	RES-CHIP	470	5%	1/10W	
R8326	1-216-017-91	RES-CHIP	47	5%	1/10W	
R8328	1-216-025-91	RES-CHIP	100	5%	1/10W	
R8329	1-216-025-91	RES-CHIP	100	5%	1/10W	
R8330	1-216-041-00	RES-CHIP	470	5%	1/10W	
R8331	1-216-041-00	RES-CHIP	470	5%	1/10W	
R8332	1-216-041-00	RES-CHIP	470	5%	1/10W	
R8333	1-216-041-00	RES-CHIP	470	5%	1/10W	
R8334	1-216-041-00	RES-CHIP	470	5%	1/10W	
R8336	1-216-041-00	RES-CHIP	470	5%	1/10W	
R8337	1-216-041-00	RES-CHIP	470	5%	1/10W	
R8338	1-216-017-91	RES-CHIP	47	5%	1/10W	
R8339	1-216-017-91	RES-CHIP	47	5%	1/10W	
R8340	1-216-063-91	RES-CHIP	3.9K	5%	1/10W	
R8341	1-216-041-00	RES-CHIP	470	5%	1/10W	
R8344	1-216-091-00	RES-CHIP	56K	5%	1/10W	
R8345	1-216-079-00	RES-CHIP	18K	5%	1/10W	
R8346	1-216-091-00	RES-CHIP	56K	5%	1/10W	
R8347	1-216-079-00	RES-CHIP	18K	5%	1/10W	
R8551	1-216-295-91	SHORT	0			
R8552	1-216-295-91	SHORT	0			
R8553	1-216-295-91	SHORT	0			
R8806	1-216-085-00	RES-CHIP	33K	5%	1/10W	
R8807	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R8820	1-216-295-91	SHORT	0			
R8826	1-216-051-00	RES-CHIP	1.2K	5%	1/10W	
R8836	1-216-025-91	RES-CHIP	100	5%	1/10W	
R8841	1-216-025-91	RES-CHIP	100	5%	1/10W	
R8846	1-216-295-91	SHORT	0			
R8854	1-216-029-00	RES-CHIP	150	5%	1/10W	
R8855	1-216-031-00	RES-CHIP	180	5%	1/10W	
R8856	1-216-055-91	RES-CHIP	1.8K	5%	1/10W	
R8857	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R8858	1-216-079-00	RES-CHIP	18K	5%	1/10W	
R8859	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	

REF. NO.	PART.NO	DESCRIPTION				REMARK
R8861	1-216-295-91	SHORT	0			
R8863	1-216-295-91	SHORT	0			
R8865	1-216-022-00	RES-CHIP	75	5%	1/10W	
R8866	1-216-022-00	RES-CHIP	75	5%	1/10W	
R8867	1-216-049-91	RES-CHIP	1K	5%	1/10W	
R8868	1-216-017-91	RES-CHIP	47	5%	1/10W	
R8869	1-216-017-91	RES-CHIP	47	5%	1/10W	
R8871	1-216-049-91	RES-CHIP	1K	5%	1/10W	
R8872	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	
R8873	1-216-113-00	RES-CHIP	470K	5%	1/10W	
R8874	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	
R8875	1-216-113-00	RES-CHIP	470K	5%	1/10W	
R8876	1-216-093-91	RES-CHIP	68K	5%	1/10W	
R8877	1-216-093-91	RES-CHIP	68K	5%	1/10W	
R8878	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	
R8879	1-216-689-11	METAL CHIP	39K	0.5%	1/10W	
R8880	1-216-295-91	SHORT	0			
R8881	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R8882	1-216-079-00	RES-CHIP	18K	5%	1/10W	
R8883	1-216-645-11	METAL CHIP	560	0.5%	1/10W	
R8885	1-216-645-11	METAL CHIP	560	0.5%	1/10W	
R8888	1-216-033-00	RES-CHIP	220	5%	1/10W	
R8889	1-216-033-00	RES-CHIP	220	5%	1/10W	
R8890	1-216-295-91	SHORT	0			
R8892	1-216-295-91	SHORT	0			
R8893	1-216-295-91	SHORT	0			
R8900	1-216-039-00	RES-CHIP	390	5%	1/10W	
R8901	1-216-049-91	RES-CHIP	1K	5%	1/10W	
R8902	1-216-039-00	RES-CHIP	390	5%	1/10W	
R8903	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R8904	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R8905	1-216-113-00	RES-CHIP	470K	5%	1/10W	
R8906	1-216-035-00	RES-CHIP	270	5%	1/10W	
R8907	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	
R8908	1-216-035-00	RES-CHIP	270	5%	1/10W	
R8909	1-216-049-91	RES-CHIP	1K	5%	1/10W	
R8911	1-216-025-91	RES-CHIP	100	5%	1/10W	
R8913	1-216-022-00	RES-CHIP	75	5%	1/10W	
R8914	1-216-071-00	RES-CHIP	8.2K	5%	1/10W	
R8915	1-216-022-00	RES-CHIP	75	5%	1/10W	
R8916	1-216-017-91	RES-CHIP	47	5%	1/10W	
R8917	1-216-017-91	RES-CHIP	47	5%	1/10W	
R8918	1-216-113-00	RES-CHIP	470K	5%	1/10W	
R8919	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	
R8922	1-216-022-00	RES-CHIP	75	5%	1/10W	
R8923	1-216-022-00	RES-CHIP	75	5%	1/10W	
R8924	1-216-022-00	RES-CHIP	75	5%	1/10W	

REF. NO.	PART.NO	DESCRIPTION	REMARK
R8925	1-216-022-00	RES-CHIP 75 5% 1/10W	
R8926	1-216-017-91	RES-CHIP 47 5% 1/10W	
R8927	1-216-017-91	RES-CHIP 47 5% 1/10W	
R8928	1-216-017-91	RES-CHIP 47 5% 1/10W	
R8929	1-216-039-00	RES-CHIP 390 5% 1/10W	
R8930	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R8931	1-216-039-00	RES-CHIP 390 5% 1/10W	
R8932	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R8933	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8934	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8935	1-216-113-00	RES-CHIP 470K 5% 1/10W	
R8936	1-216-113-00	RES-CHIP 470K 5% 1/10W	
R8937	1-216-035-00	RES-CHIP 270 5% 1/10W	
R8938	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R8939	1-216-035-00	RES-CHIP 270 5% 1/10W	
R8940	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R8941	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8942	1-216-009-91	RES-CHIP 22 5% 1/10W	
R8943	1-216-022-00	RES-CHIP 75 5% 1/10W	
R8944	1-216-071-00	RES-CHIP 8.2K 5% 1/10W	
R8945	1-216-022-00	RES-CHIP 75 5% 1/10W	
R8946	1-216-017-91	RES-CHIP 47 5% 1/10W	
R8947	1-216-039-00	RES-CHIP 390 5% 1/10W	
R8948	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R8949	1-216-022-00	RES-CHIP 75 5% 1/10W	
R8950	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8951	1-216-017-91	RES-CHIP 47 5% 1/10W	
R8952	1-216-113-00	RES-CHIP 470K 5% 1/10W	
R8953	1-216-035-00	RES-CHIP 270 5% 1/10W	
R8954	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R8955	1-216-039-00	RES-CHIP 390 5% 1/10W	
R8956	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R8957	1-216-025-91	RES-CHIP 100 5% 1/10W	
R8958	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8959	1-216-022-00	RES-CHIP 75 5% 1/10W	
R8960	1-216-017-91	RES-CHIP 47 5% 1/10W	
R8961	1-216-022-00	RES-CHIP 75 5% 1/10W	
R8962	1-216-071-00	RES-CHIP 8.2K 5% 1/10W	
R8963	1-216-113-00	RES-CHIP 470K 5% 1/10W	
R8964	1-216-035-00	RES-CHIP 270 5% 1/10W	
R8965	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R8968	1-216-022-00	RES-CHIP 75 5% 1/10W	
R8969	1-216-017-91	RES-CHIP 47 5% 1/10W	
R8974	1-216-057-00	RES-CHIP 2.2K 5% 1/10W	
R8977	1-216-037-00	RES-CHIP 330 5% 1/10W	
R8978	1-216-037-00	RES-CHIP 330 5% 1/10W	
R8979	1-216-045-00	RES-CHIP 680 5% 1/10W	
R8980	1-216-045-00	RES-CHIP 680 5% 1/10W	
R8981	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R8982	1-216-079-00	RES-CHIP 18K 5% 1/10W	
R8996	1-216-059-00	RES-CHIP 2.7K 5% 1/10W	
R8997	1-216-071-00	RES-CHIP 8.2K 5% 1/10W	
R8998	1-216-041-00	RES-CHIP 470 5% 1/10W	

< CRYSTAL >

REF. NO.	PART.NO	DESCRIPTION	REMARK
X8200	1-781-148-21	VIBRATOR, CRYSTAL	
X8301	1-781-612-11	VIBRATOR, CRYSTAL	

*A-1644-108-A VM Board, Complete

REF. NO.	PART.NO	DESCRIPTION	REMARK
	4-382-854-11	SCREW (M3X10), P, SW (+)	

< CAPACITOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
C5400	1-107-883-11	ELECT 330UF 20.00% 16V	
C5401	1-126-935-11	ELECT 470UF 20.00% 16V	
C5402	1-137-150-11	MYLAR 0.01UF 5.00% 50V	
C5403	1-126-935-11	ELECT 470UF 20.00% 6.3V	
C5405	1-126-933-11	ELECT 100UF 20.00% 16V	
C5406	1-126-935-11	ELECT 470UF 20.00% 6.3V	
C5407	1-107-364-11	MYLAR 0.01UF 10.00% 200V	
C5408	1-107-364-11	MYLAR 0.01UF 10.00% 200V	
C5409	1-107-649-11	ELECT 2.2UF 20.00% 250V	
C5410	1-130-471-00	MYLAR 0.001UF 5.00% 50V	
C5411	1-130-471-00	MYLAR 0.001UF 5.00% 50V	
C5412	1-126-935-11	ELECT 470UF 20.00% 16V	
C5413	1-126-935-11	ELECT 470UF 20.00% 16V	
C5414	1-107-652-11	ELECT 10UF 20.00% 250V	
C5415	1-107-363-91	MYLAR 0.0068UF 10.00% 200V	
C5417	1-102-514-91	CERAMIC 22PF 5.00% 50V	
C5418	1-102-947-00	CERAMIC 10PF 0.50PF 50V	

< CONNECTOR >

REF. NO.	PART.NO	DESCRIPTION	REMARK
CN5402	*1-564-506-51	PLUG, CONNECTOR 3P	
CN5444	*1-770-723-11	CONNECTOR, BOARD TO BOARD 8P	
CN5602	*1-568-881-51	PIN, CONNECTOR 6P	

< DIODE >

REF. NO.	PART.NO	DESCRIPTION	REMARK
D5400	8-719-991-33	DIODE 1SS133T-77	
D5401	8-719-510-02	DIODE D1NS4-TR	
D5402	1-535-143-61	LEAD, JUMPER (5.0MM)	
D5403	8-719-991-33	DIODE 1SS133T-77	
D5404	8-719-991-33	DIODE 1SS133T-77	
D5405	8-719-924-11	DIODE MTZJ-T-77-22	
D5406	8-719-924-11	DIODE MTZJ-T-77-22	

VM

REF. NO.	PART.NO	DESCRIPTION	REMARK
		< FERRITE BEAD >	
FB5400	1-535-143-61	LEAD, JUMPER (5.0MM)	
FB5401	1-535-143-61	LEAD, JUMPER (5.0MM)	
		< COIL >	
L5400	1-410-784-41	INDUCTOR 0.18UH	
L5401	1-408-602-31	INDUCTOR 8.2UH	
		< TRANSISTOR >	
Q5400	8-729-119-78	TRANSISTOR 2SC1740S-RT	
Q5401	8-729-119-78	TRANSISTOR 2SC1740S-RT	
Q5402	8-729-119-78	TRANSISTOR 2SC1740S-RT	
Q5403	8-729-119-78	TRANSISTOR 2SC1740S-RT	
Q5404	8-729-026-39	TRANSISTOR 2SA933AS-RT	
Q5405	8-729-026-39	TRANSISTOR 2SA933AS-RT	
Q5406	8-729-045-05	TRANSISTOR 2SA2005	
Q5407	8-729-045-04	TRANSISTOR 2SC5511	
Q5408	8-729-026-39	TRANSISTOR 2SA933AS-RT	
Q5409	8-729-119-78	TRANSISTOR 2SC1740S-RT	
		< RESISTOR >	
R5401	1-247-843-11	CARBON 3.3K 5% 1/4W	
R5402	1-249-413-11	CARBON 470 5% 1/4W	
R5403	1-249-393-11	CARBON 10 5% 1/4W	
R5404	1-249-420-11	CARBON 1.8K 5% 1/4W	
R5405	1-249-425-11	CARBON 4.7K 5% 1/4W	
R5406	1-249-425-11	CARBON 4.7K 5% 1/4W	
R5407	1-249-399-11	CARBON 33 5% 1/4W	
R5408	1-247-807-31	CARBON 100 5% 1/4W	
R5409	1-249-409-11	CARBON 220 5% 1/4W	
R5410	1-249-401-11	CARBON 47 5% 1/4W	
R5411	1-249-401-11	CARBON 47 5% 1/4W	
R5412	1-249-429-11	CARBON 10K 5% 1/4W	
R5413	1-249-414-11	CARBON 560 5% 1/4W	
R5414	1-249-432-11	CARBON 18K 5% 1/4W	
R5415	1-247-739-11	CARBON 100 5% 1/2W	
R5416	1-249-389-11	CARBON 4.7 5% 1/4W	
R5417	1-249-432-11	CARBON 18K 5% 1/4W	
R5418	1-249-414-11	CARBON 560 5% 1/4W	
R5419	1-249-421-11	CARBON 2.2K 5% 1/4W	
R5420	1-249-421-11	CARBON 2.2K 5% 1/4W	
R5421	1-249-387-11	CARBON 3.3 5% 1/4W	
R5422	1-249-405-11	CARBON 100 5% 1/4W	
R5423	1-215-915-11	METAL OXIDE 470 5% 3W	
R5425	1-535-143-61	LEAD, JUMPER (5.0MM)	
R5427	1-249-401-11	CARBON 47 5% 1/4W	
R5428	1-249-413-11	CARBON 470 5% 1/4W	
R5429	1-249-413-11	CARBON 470 5% 1/4W	
R5430	1-249-417-11	CARBON 1K 5% 1/4W	
R5432	1-249-415-11	CARBON 680 5% 1/4W	
R5433	1-249-400-11	CARBON 39 5% 1/4W	
R5434	1-249-395-11	CARBON 15 5% 1/4W	

The components identified by shading and marked ⚠ are critical for safety
Replace only with the part number specified.

MISCELLANEOUS

REF. NO.	PART.NO	DESCRIPTION	REMARK
⚠	1-416-654-11	COIL DEMAGNETIC	
	1-452-032-00	MAGNET, DISK; 10MM	
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM	
⚠	1-453-340-11	TRANSFORMER ASSY, FLYBACK (NX4522//U214)	
	1-529-899-11	SPEAKER (24x4.2CM)	
	1-452-896-11	COIL, NA ROTATION (RT200)	
⚠	1-571-433-21	SWITCH, PUSH (AC POWER)	
⚠	1-792-389-11	CORD, POWER	
⚠	8-453-011-11	NECK ASSY, (NA-299-M)	
	1-693-340-11	TUNER/VIF(FR) (KV-29FX65B)	
	1-693-338-11	TUNER/VIF(AEP) (KV-29FX65E/29FX65K)	
⚠	8-735-053-05	PICTURE TUBE (M68LNH060X)	
⚠	8-451-504-31	DEFLECTION YOKE (Y29RSC-S)	
⚠	1-251-807-22	CAP ASSY, HIGH VOLTAGE	
	1-790-082-11	CABLE, RF	
	1-529-417-11	SPEAKER (8CM)	

ACCESSORIES AND PACKAGING MATERIALS

REF. NO.	PART.NO	DESCRIPTION	REMARK
	4-205-738-21	MANUAL, INSTRUCTION (KV-29FX65B) (GERMAN/FRENCH/ITALIAN/DUTCH)	
	4-205-738-11	MANUAL, INSTRUCTION (KV-29FX65E) (GERMAN)	
	4-205-738-41	MANUAL, INSTRUCTION (KV-29FX65E) (DANISH/SPANISH/FINNISH/NORWEGIAN/PORTUGUESE/ GERMAN/GREEK/ITALIAN/TURKISH)	
	4-205-738-31	MANUAL, INSTRUCTION (KV-29FX65K) (BULGARIAN/CZECH/ENGLISH/HUNGARIAN/ POLISH/RUSSIAN)	
	*4-029-168-01	BAG, PROTECTION	
	*4-205-494-01	INDIVIDUAL CARTON	
	*4-205-495-01	CUSHION (UPPER) (ASSY)	
	*4-205-496-01	CUSHION (LOWER) (ASSY)	

REMOTE COMMANDER

REF. NO.	PART.NO	DESCRIPTION	REMARK
	1-418-476-21	REMOTE COMMANDER (RM-887)	

TRACE

A new TV Repair Assistance Tool that combines ease of use and powerful PC software tools to allow you to save valuable time during many TV repairs.

RS-232
IR
I²C
SONY-TCSE
TRACE
CTRL
POWER
9V DC
POWER

The TRACE interface connects to the PC's serial port. It provides connection to the TV's I²C bus and can be provided with an InfraRed transmitter (optional).

The interface is powered by a standard 9 V PP3 battery for portable use, and can also be powered by an external 9V/25mA DC power supply.

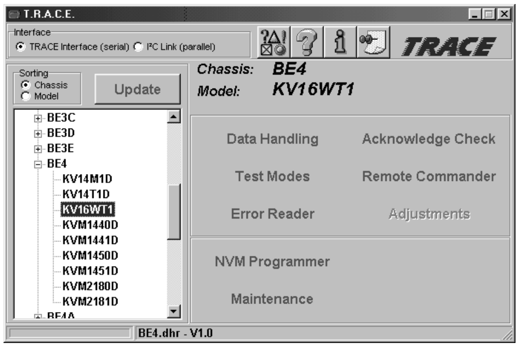
The TRACE software that is supplied with the interface allows you to:

- Read, restore and compare NVM contents via the I²C bus
- Acknowledge check of all I²C devices in the TV set
- Read Error Codes (emulation of the Error Reader tool)

With the optional IR Add-on kit, the following features can be added:

- Remote Commander emulation
- User programmable Functional Check through Infrared
- Fast and documented Test Mode setting of all Sony TV chassis

Additional features such as Adjustments and Troubleshooting are available in chassis-dependent software modules. Please contact your local Sony Service organisation for the latest information.



Interface: ● TRACE Interface (serial) ○ PC Link (parallel)

Sorting: ● Chassis ○ Model

Chassis: BE4

Model: KV16WT1

T.R.A.C.E.
TRACE
Update
BE3C
BE3D
BE3E
BE4
KV14M1D
KV14T1D
KV16WT1
KVM1440D
KVM1441D
KVM1450D
KVM1451D
KVM2180D
KVM2181D
BE4A
Data Handling
Acknowledge Check
Test Modes
Remote Commander
Error Reader
Adjustments
NVM Programmer
Maintenance
BE4.dhr - V1.0

Note: For workshops already using the existing I²C Link parallel port interface (9-948-320-30), this software can be used as well, replacing the TV Data Handling software (9-948-340-50), but Error Reader and IR functions can only be accessed with the TRACE interface.

Partnumbers:		
	TRACE Starter Kit (TRACE interface + software):	9-948-320-70
	TRACE Software (for users of the I²C Link interface):	9-948-340-80
	TRACE IR Add-on (IR interface + Remote Commander software):	9-948-320-80

PC requirements: IBM-compatible PC with operating system Windows95, Windows98, or WindowsNT*.

* WindowsNT only supported with TRACE interface

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